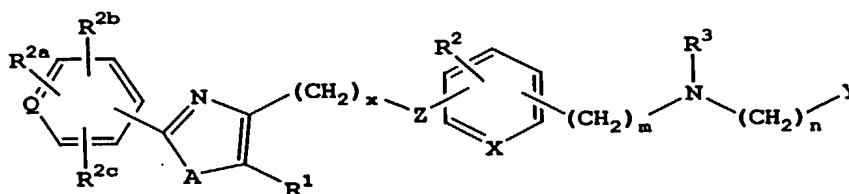


-



5

wherein x is 1, 2, 3 or 4; m is 1 or 2; n is 1 or 2;

O is C or N;

A is 0 or S;

Z is 0 or a bond;

10 R^1 is H or lower alkyl;

X is CH or N;

R² is H, alkyl, alkoxy, halogen, amino or substituted amino;

R^{2a} , R^{2b} and R^{2c} are the same or different and are
15 selected from H, alkyl, alkoxy, halogen, amino or
substituted amino;

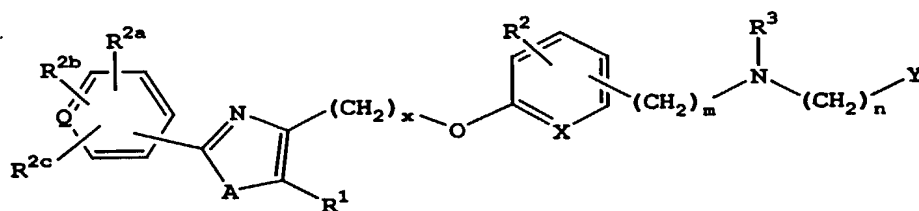
R³ is H, alkyl, arylalkyl, aryloxy carbonyl, alkyloxy carbonyl, alkynyloxy carbonyl, alkenyloxy carbonyl, aryl carbonyl, alkyl carbonyl, aryl, heteroaryl, alkyl(halo)aryloxy carbonyl, alkyloxy(halo)aryloxy carbonyl, cycloalkylaryloxy carbonyl, cycloalkyloxyaryloxy carbonyl, cycloheteroalkyl, heteroaryl carbonyl, heteroaryl-heteroarylalkyl, alkyl carbonylamino, aryl carbonylamino, heteroaryl carbonylamino, alkoxy carbonylamino, aryloxy carbonylamino, heteroaryloxy carbonylamino, heteroaryl-heteroaryl carbonyl, alkylsulfonyl, alkenylsulfonyl, heteroaryloxy carbonyl, cycloheteroalkyloxy carbonyl, heteroarylalkyl, aminocarbonyl, substituted aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, heteroarylalkenyl, cycloheteroalkylheteroarylalkyl, hydroxyalkyl, alkoxy, alkoxyaryloxy carbonyl, arylalkyloxy carbonyl, alkylaryloxy carbonyl, arylheteroarylalkyl, arylalkylarylalkyl, aryloxyarylalkyl, alkynyloxy carbonyl,

haloalkoxyaryloxycarbonyl, alkoxycarbonylaryloxycarbonyl,
 aryloxyaryloxycarbonyl, arylsulfinylarylcarbonyl,
 arylthioarylcarbonyl, alkoxycarbonylaryloxycarbonyl,
 arylalkenyloxycarbonyl, heteroaryloxyarylalkyl,
 5 aryloxyarylcarbonyl, aryloxyarylalkyloxycarbonyl,
 arylalkenyloxycarbonyl, arylalkylcarbonyl,
 aryloxyalkyloxycarbonyl arylalkylsulfonyl,
 arylthiocarbonyl, arylalkenylsulfonyl,
 heteroarylsulfonyl, arylsulfonyl, alkoxylalkyl,
 10 heteroarylalkoxycarbonyl, arylheteroarylalkyl,
 alkoxylalkylcarbonyl, aryloxyheteroarylalkyl,
 heteroarylalkyloxyarylalkyl, arylarylalkyl,
 arylalkenylarylalkyl, arylalkoxyarylalkyl,
 arylcarbonylarylalkyl, alkylaryloxyarylalkyl,
 15 arylalkoxycarbonylheteroarylalkyl, heteroarylarylalkyl,
 arylcarbonylheteroarylalkyl, heteroaryloxyarylalkyl,
 arylalkenylheteroarylalkyl, arylaminoarylalkyl or
 aminocarbonylarylalkyl;

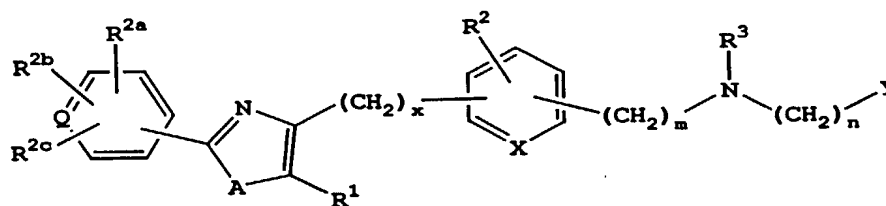
Y is CO_2R^4 (where R^4 is H or alkyl, or a prodrug
 20 ester) or Y is a C-linked 1-tetrazole, a phosphinic acid
 of the structure $\text{P}(\text{O})(\text{OR}^{4a})\text{R}^5$, (where R^{4a} is H or a prodrug
 ester, R^5 is alkyl or aryl) or a phosphonic acid of the
 structure $\text{P}(\text{O})(\text{OR}^{4a})_2$, (where R^{4a} is H or a prodrug ester);

including all stereoisomers thereof, prodrug
 25 esters thereof, and pharmaceutically acceptable salts
 thereof, with the proviso that where X is CH, A is O, Q
 is C, Z is O and Y is CO_2R^4 , then R^3 is other than H or
 alkyl containing 1 to 5 carbons in the normal chain.

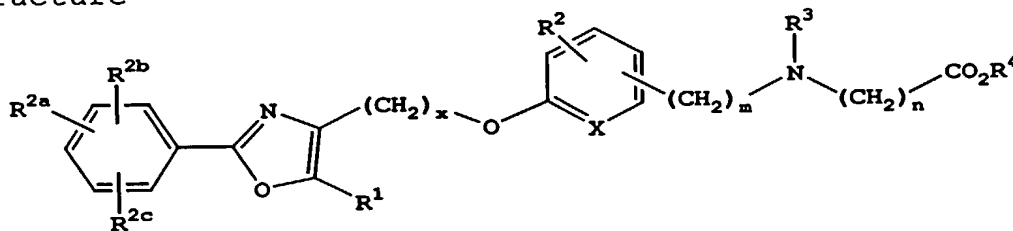
30 2. A compound having the structure



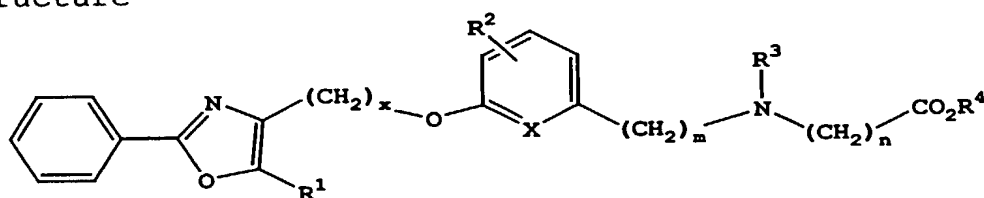
or



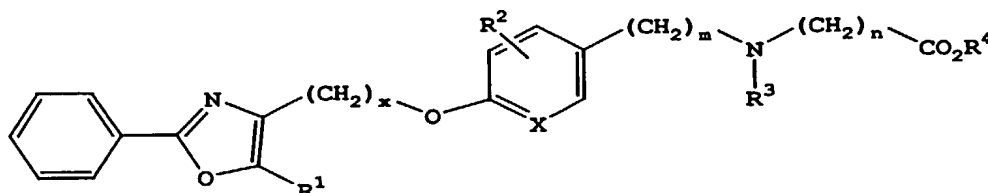
3. The compound as defined in Claim 1 having the structure



4. The compound as defined in Claim 1 having structure



or

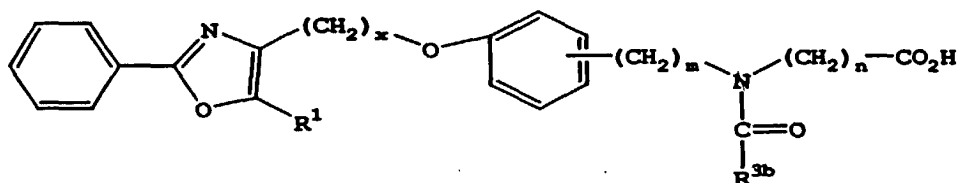


5. The compound as defined in Claim 1 wherein $(CH_2)_x$ is alkylene, alkenylene, allenyl, or alkynylene.

6. The compound as defined in Claim 4 wherein X is CH.

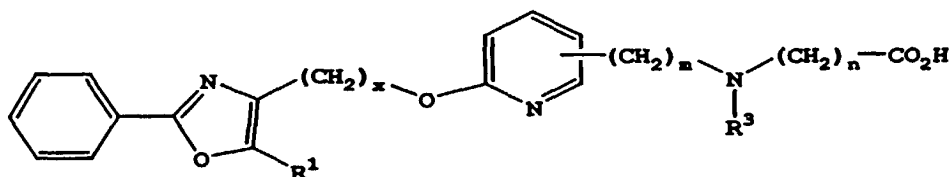
7. The compound as defined in Claim 4 wherein X is N.

8. The compound as defined in Claim 1 having the structure



wherein R¹ is alkyl, R³ᵇ is arylalkylamino, aryl-
 5 arylamino, arylamino, alkoxyarylamino, dialkoxyarylamino, dihaloarylamino or alkylthioarylamino.

9. The compound as defined in Claim 1 having the structure

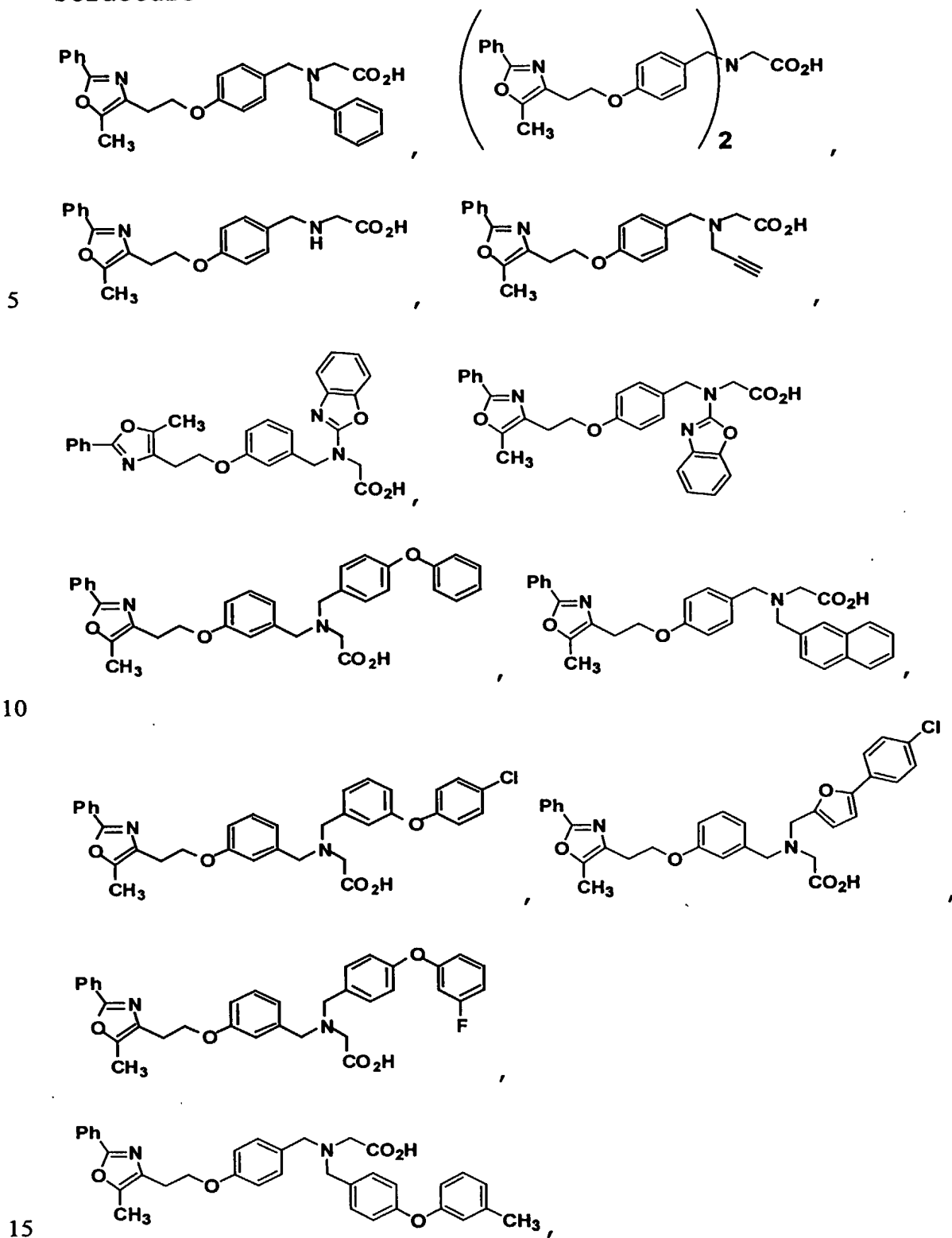


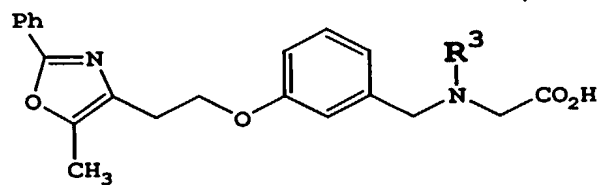
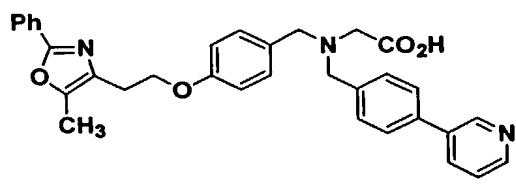
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10. The compound as defined in Claim 1 wherein R²ᵃ is alkoxy or H,

(CH₂)ₓ is CH₂, (CH₂)₂, (CH₂)₃, or $\begin{array}{c} \text{CH}_3 \quad \text{CH}_3 \\ \diagdown \quad \diagup \\ \text{C} \\ \diagup \quad \diagdown \end{array}$, (CH₂)ₘ is CH₂, or
 15 $\begin{array}{c} \text{R}^a \\ | \\ \text{CH} \end{array}$ (where Rₐ is alkyl or alkenyl), (CH₂)ₙ is CH₂, R¹ is lower alkyl, preferably -CH₃, R² is H, R²ᵃ is H, R⁴ is H, X is CH, and R³ is arylalkyloxycarbonyl, arylheteroarylalkyl, aryloxyarylalkyl, arylalkyl, aryloxycarbonyl, haloaryl-oxycarbonyl,
 20 alkoxyaryloxycarbonyl, alkylaryloxycarbonyl, aryloxyaryloxycarbonyl, heteroaryloxycarbonyl, heteroaryloxycarbonyl, aryloxyarylcarbonyl, arylalkenyloxycarbonyl, cycloalkylaryloxycarbonyl, arylalkylarylcarbonyl, heteroaryl-heteroarylalkyl,
 25 cycloalkyloxyaryloxycarbonyl, heteroaryl-heteroarylcarbonyl, alkyloxyaryloxycarbonyl, arylalkylsulfonyl, arylalkenylsulfonyl, alkoxyarylalkyl, arylthiocarbonyl, cycloheteroalkylalkyloxycarbonyl, cycloheteroalkyloxycarbonyl, or polyhaloalkylaryloxy-
 30 carbonyl, which may be optionally substituted.

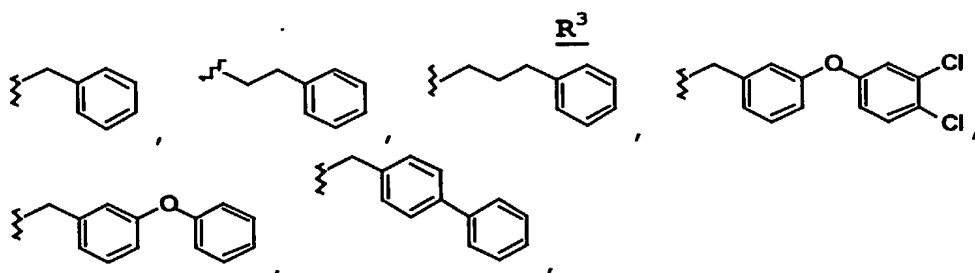
16. The compound as defined in Claim 1 having the structure



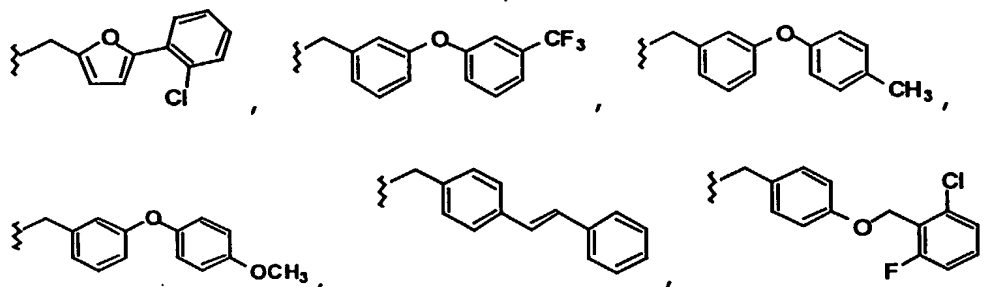


, where $R^3 =$

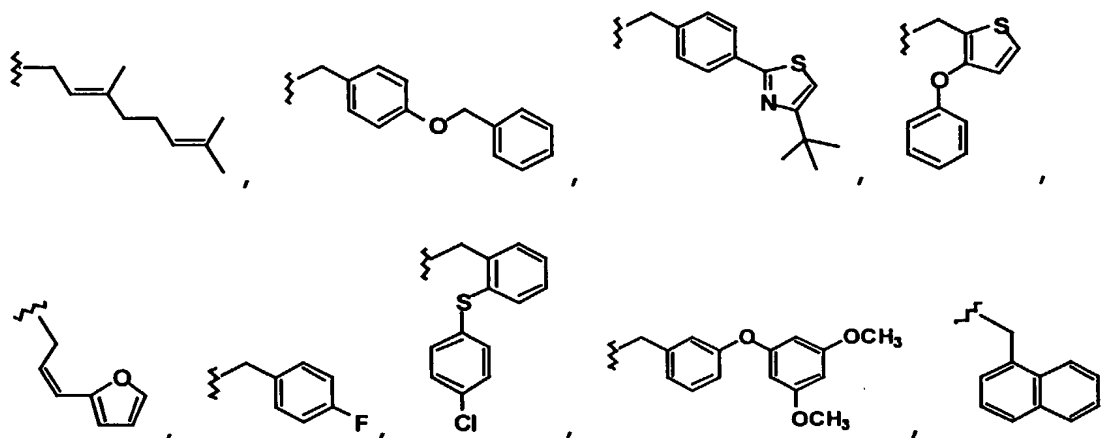
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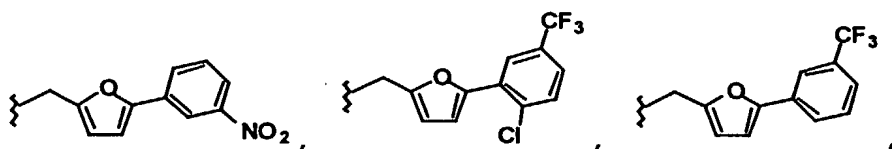


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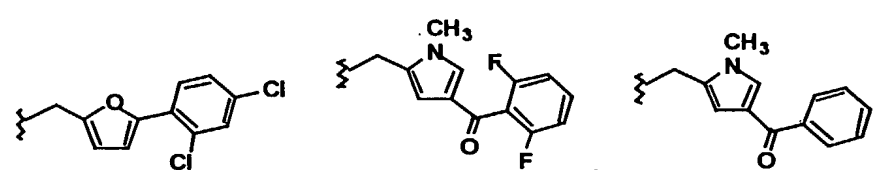
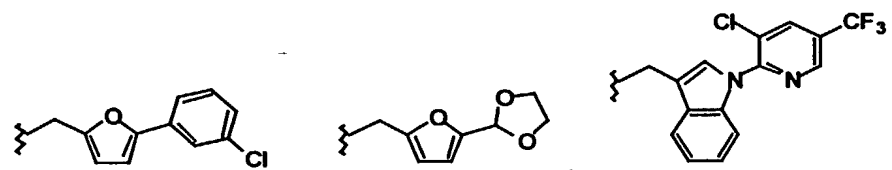


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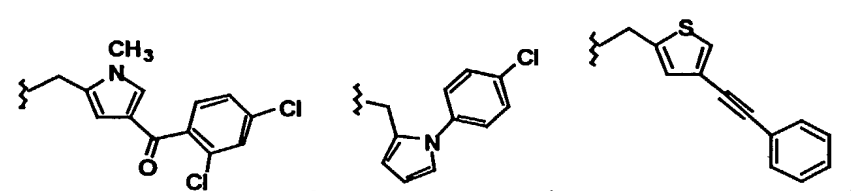




The image shows three chemical structures of monomers used in the synthesis of poly(arylene ether)s. Each structure consists of a central furan ring substituted with a 2-(2-methyl-5-oxo-1-phenylethoxy) group and a 4-substituted phenyl group. The substituents are: 4-nitrophenyl, 4-bromophenyl, and 4-bromophenyl.

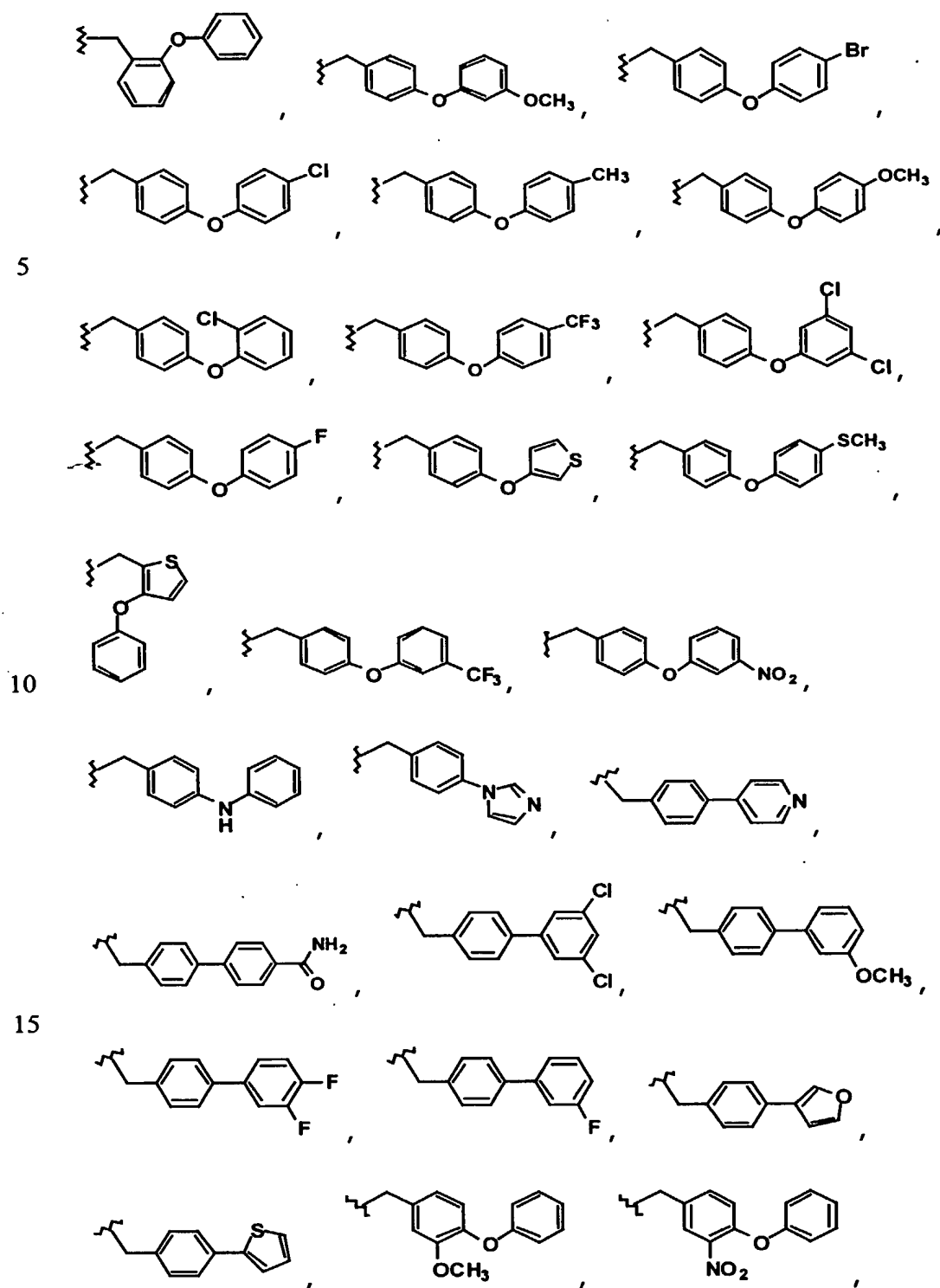


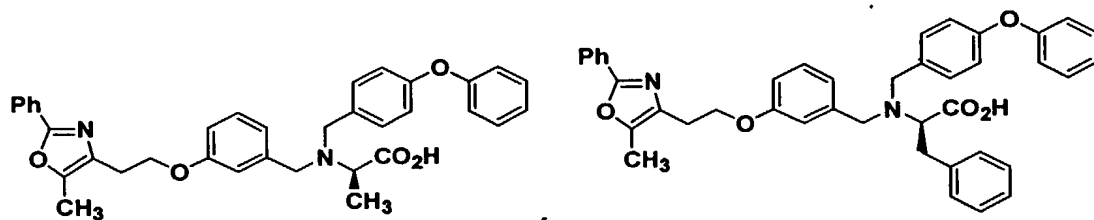
The image shows three chemical structures of polymers. The first structure is a repeating unit of a polymer with a thiophene ring substituted at the 2 and 5 positions with 4-phenylthio groups. The second structure is a repeating unit of a polymer with a thiophene ring substituted at the 2 and 5 positions with 4-phenylthio groups, and a methyl group at the 3 position. The third structure is a repeating unit of a polymer with a thiophene ring substituted at the 2 and 5 positions with 4-phenylthio groups, and a methyl group at the 3 position.



Chemical structures of three monomers:

- 2-nitro-4-(benzyloxy)phenyl
- 2-methyl-4-(benzyloxy)phenyl
- 2-chloro-4-(benzyloxy)phenyl

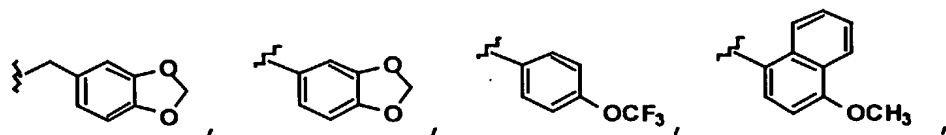
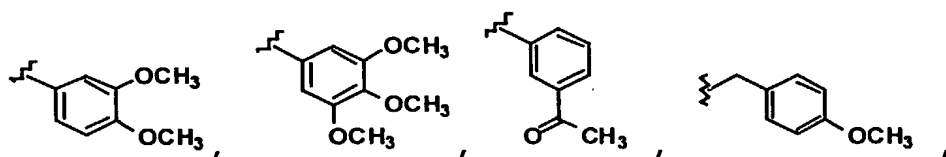




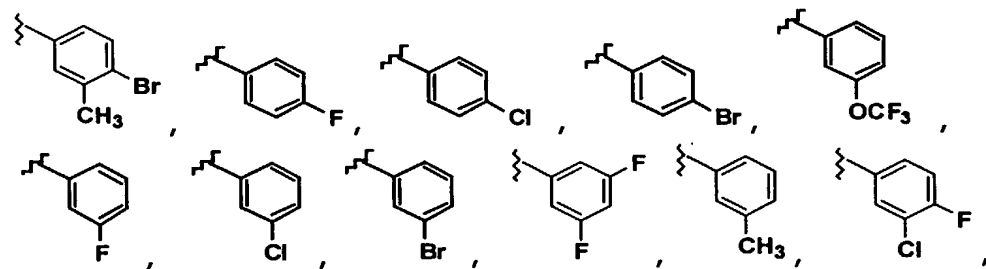
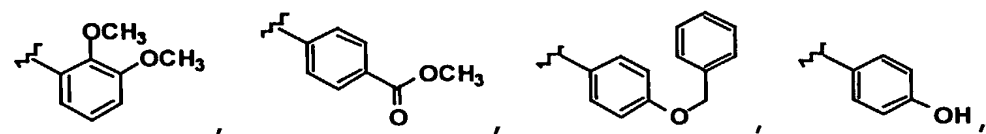
, where $R^{3c} =$



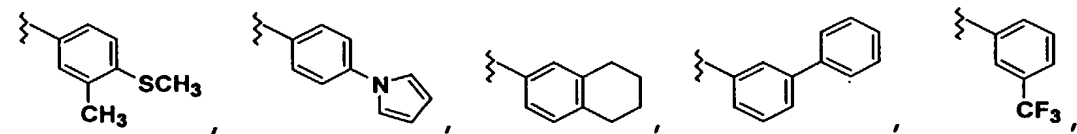
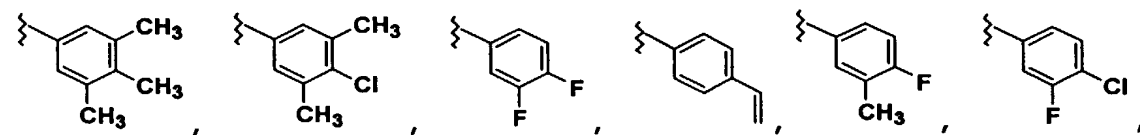




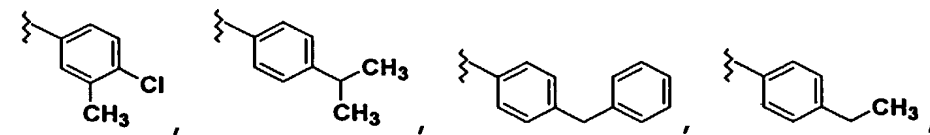
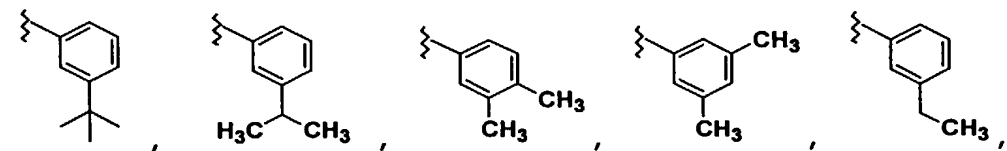
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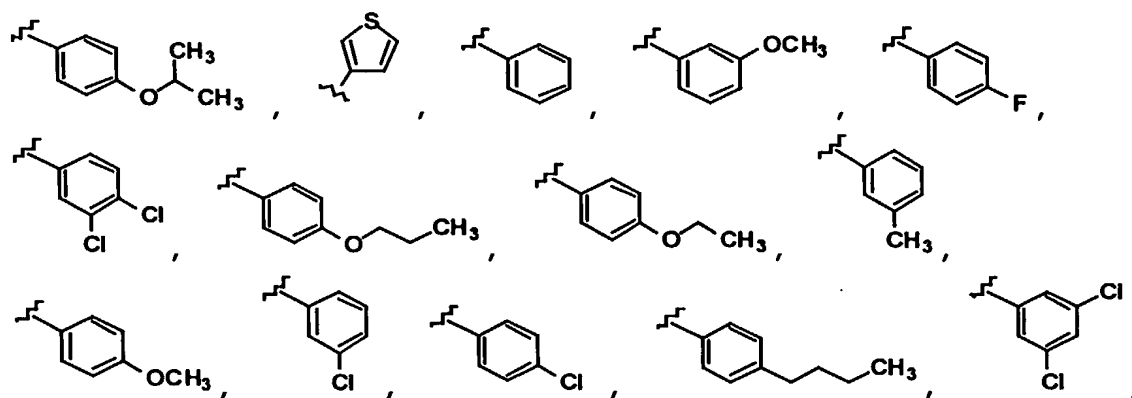


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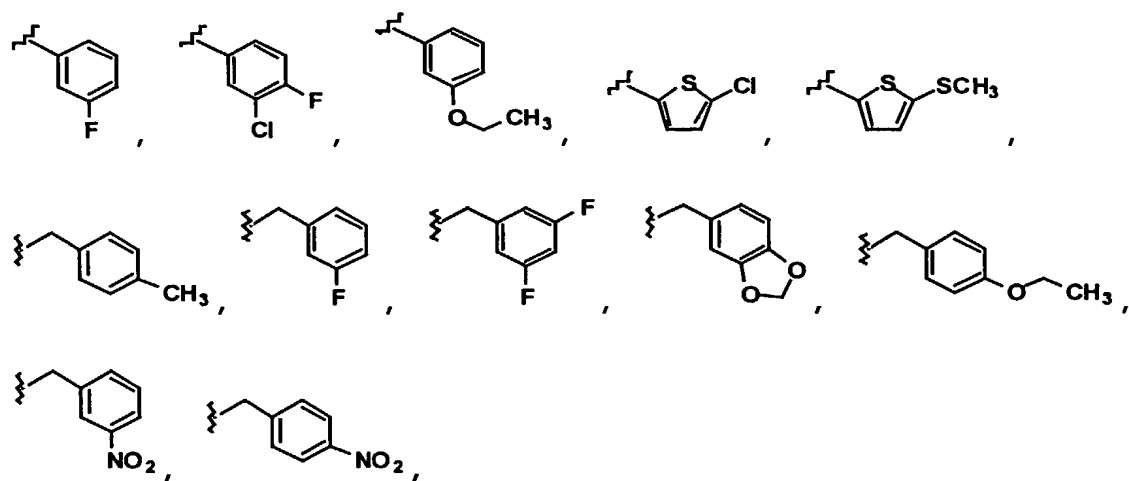




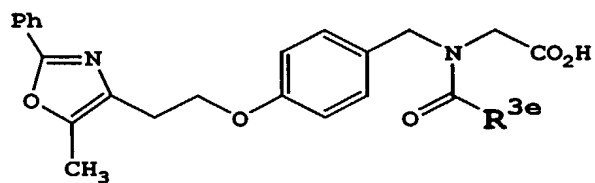




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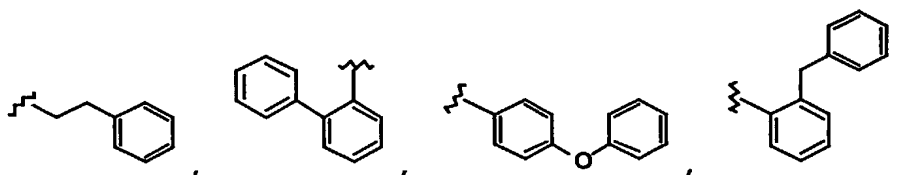


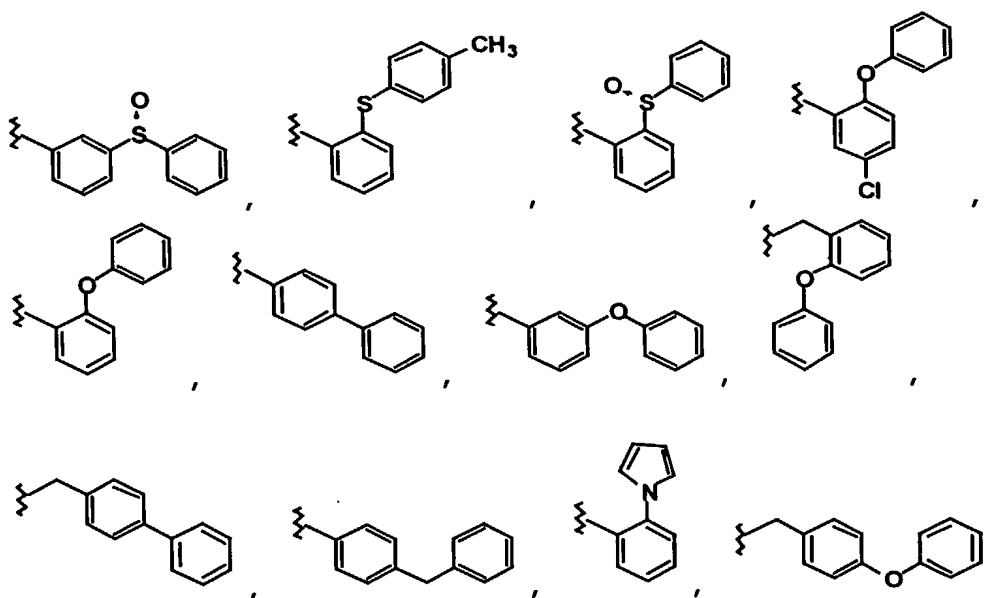
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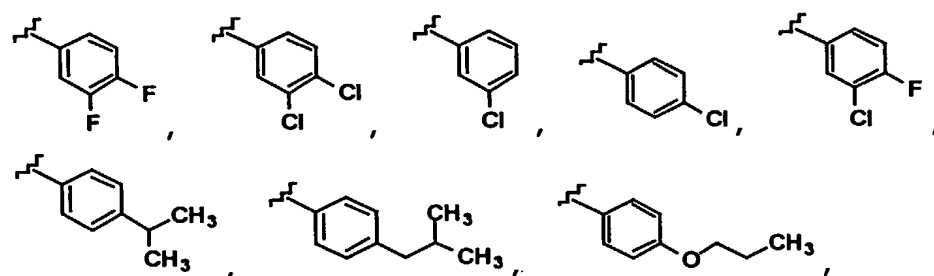
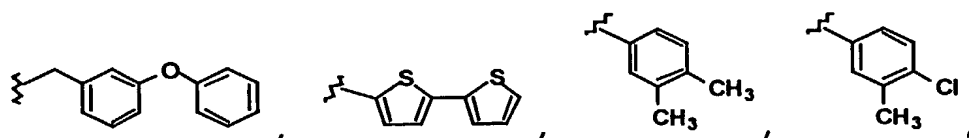
where $R^{3e} =$

15

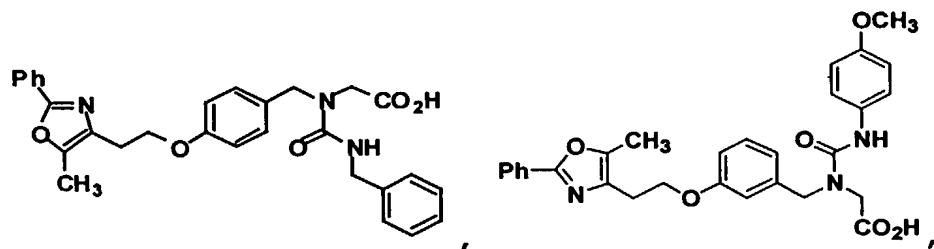
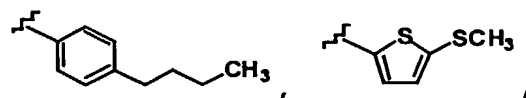


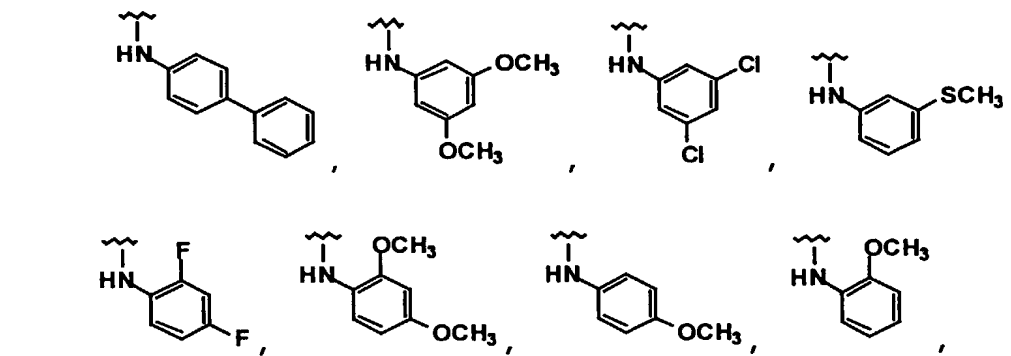
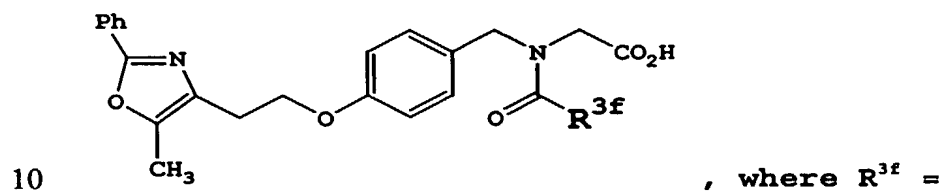
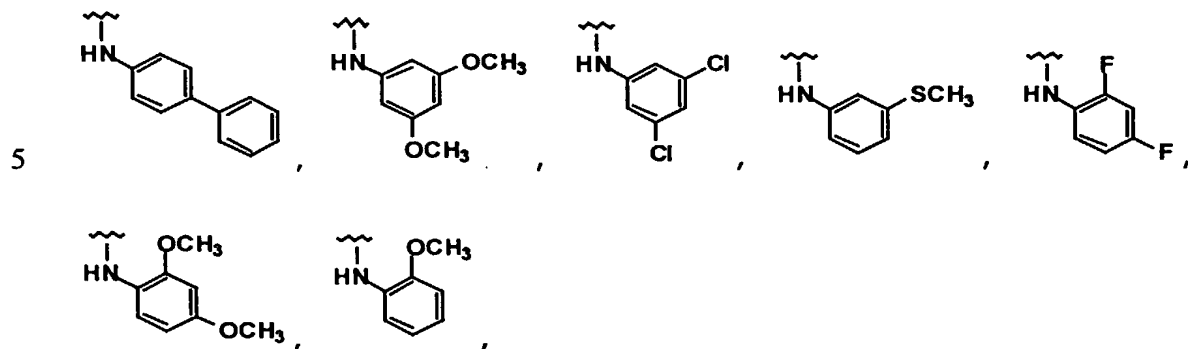
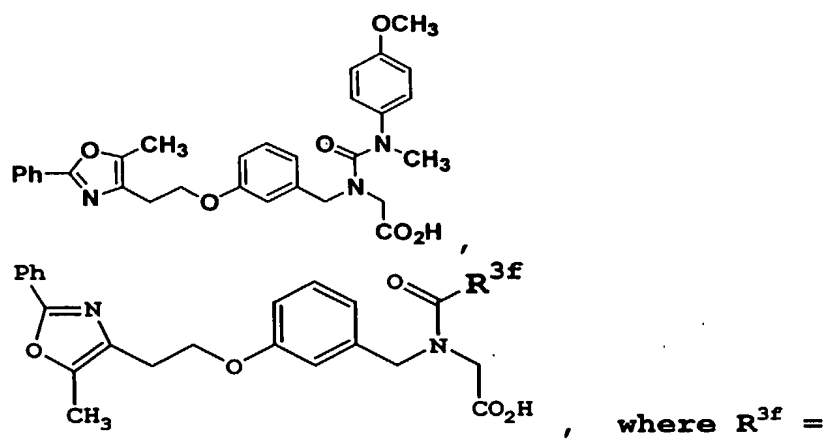


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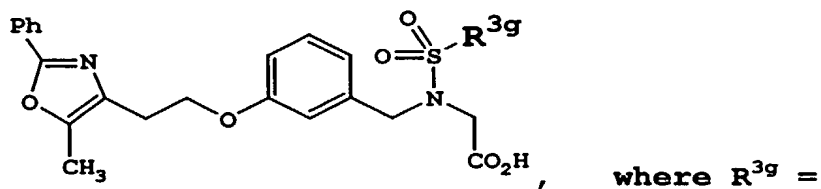
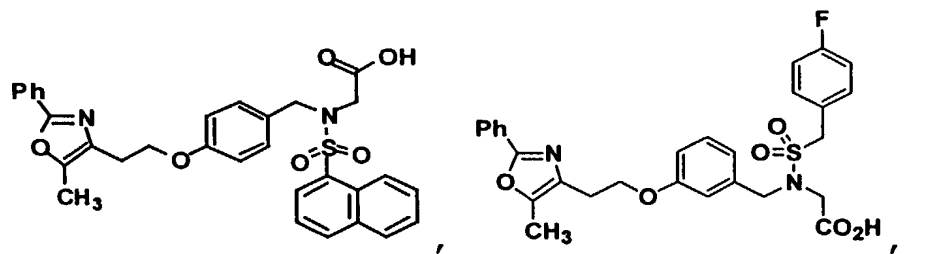


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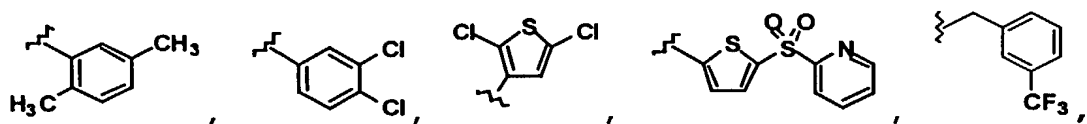
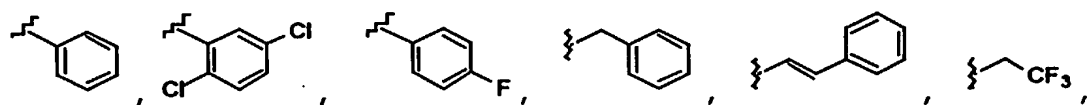




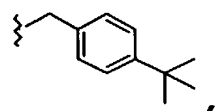
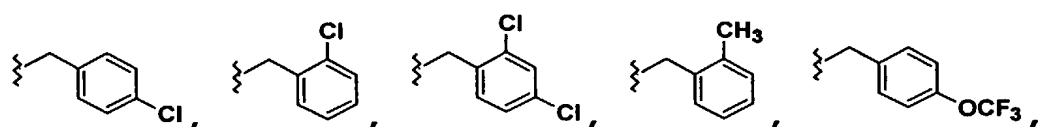
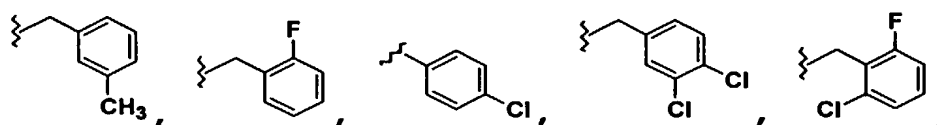
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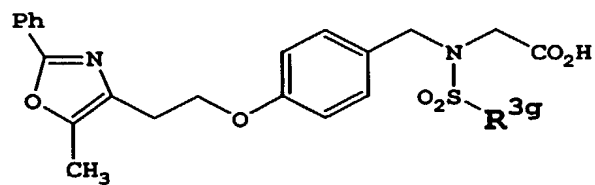
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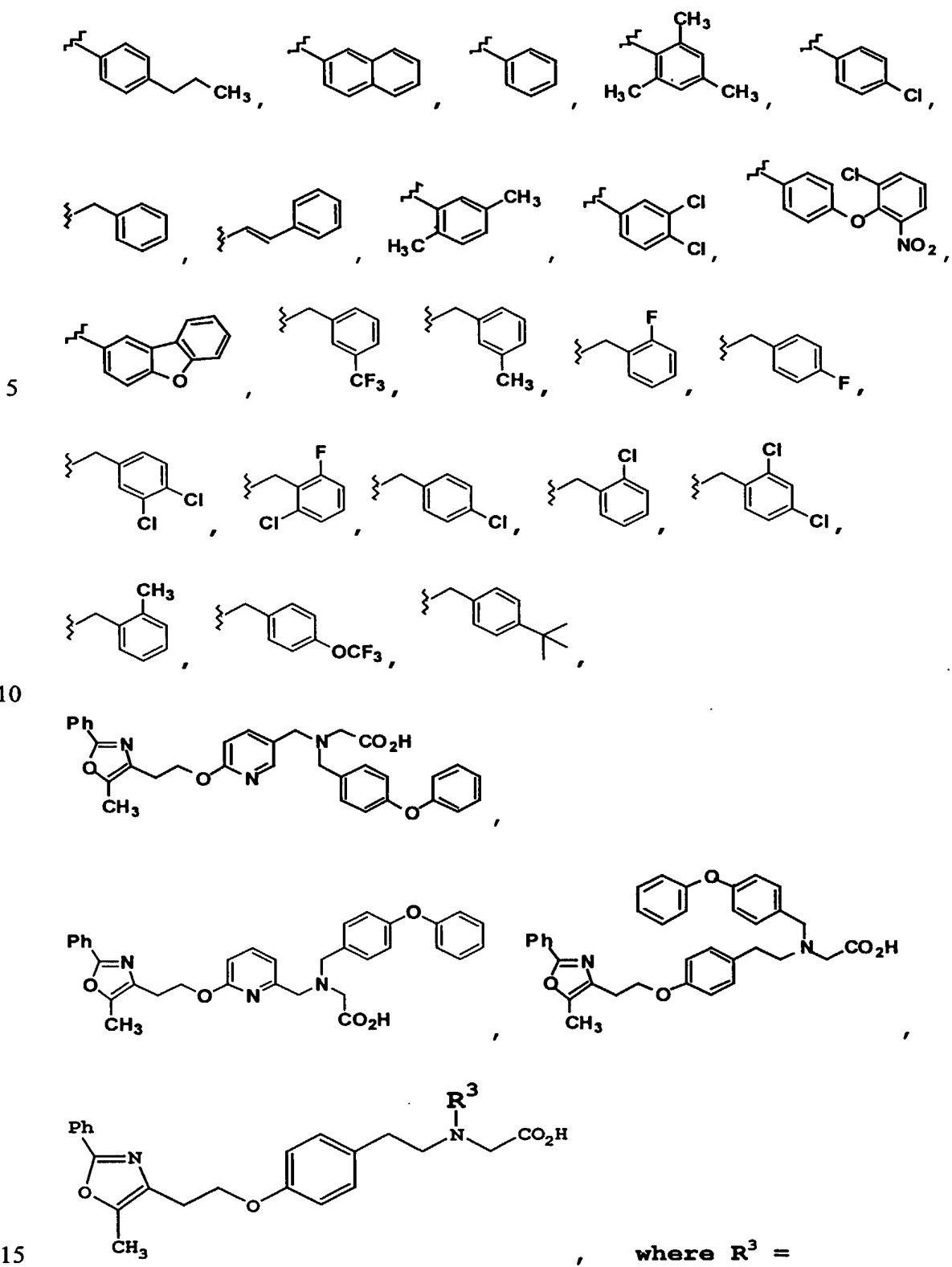


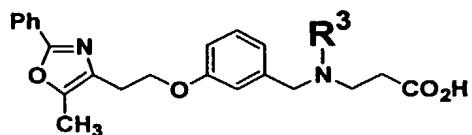
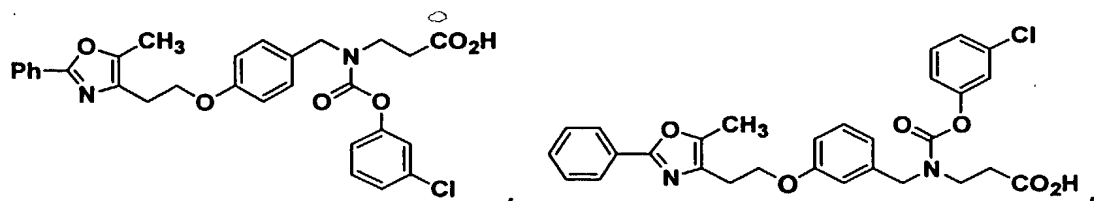
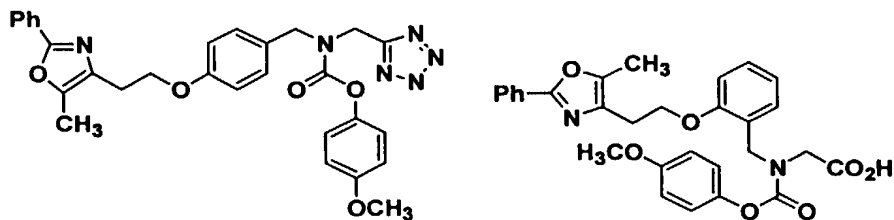
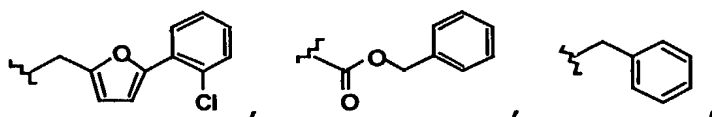
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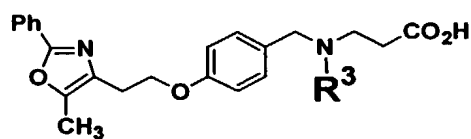
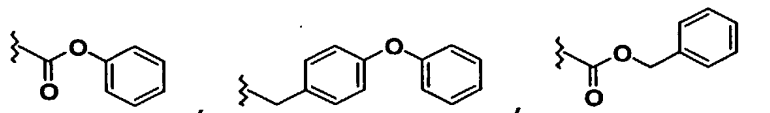
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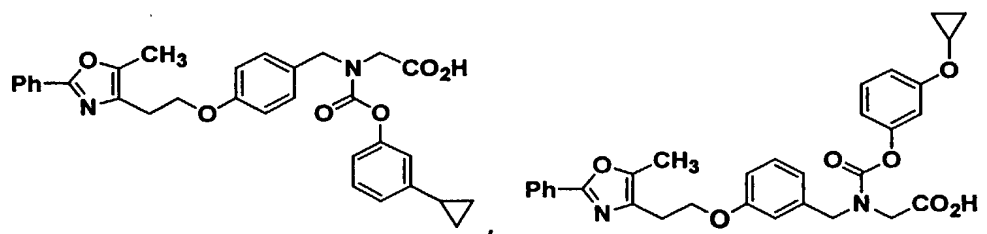
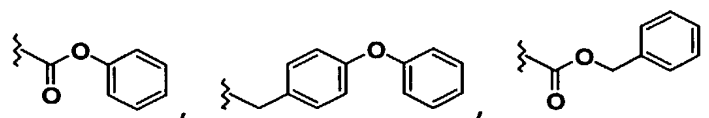


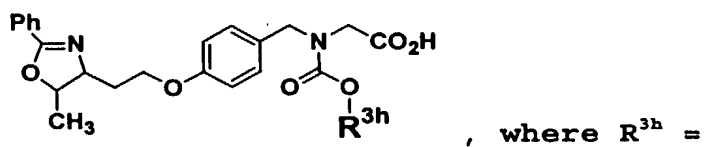
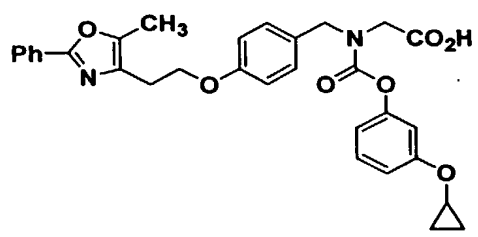


where $R^3 =$

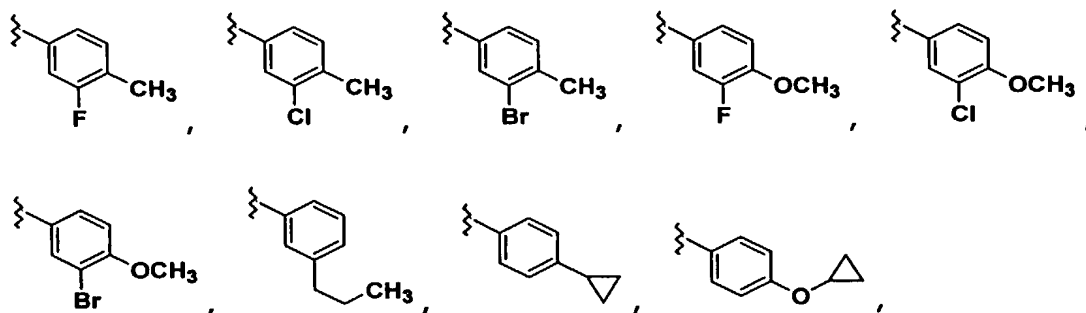


, where $R^3 =$

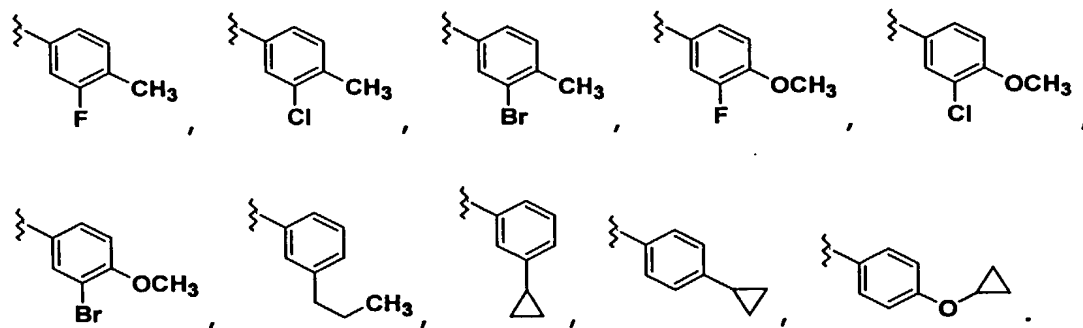
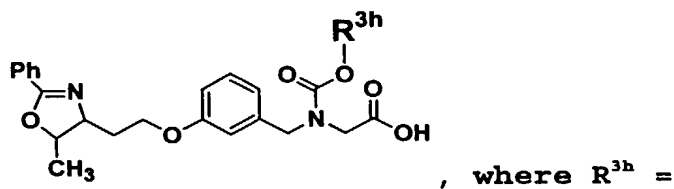




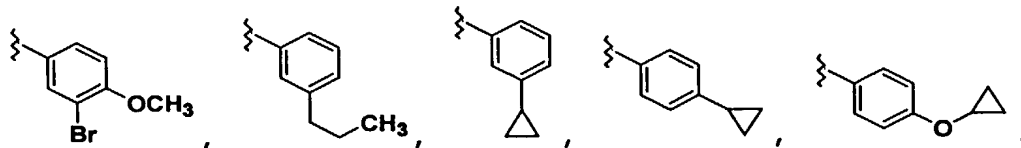
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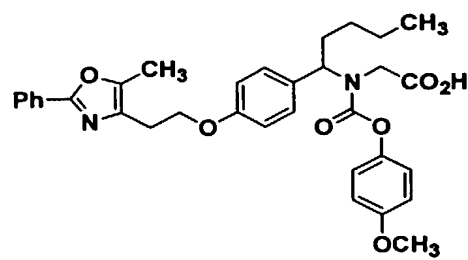
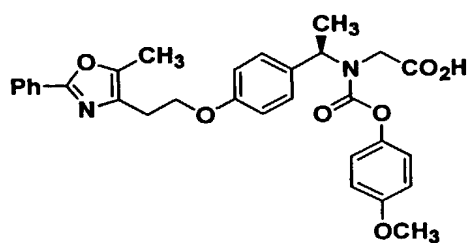
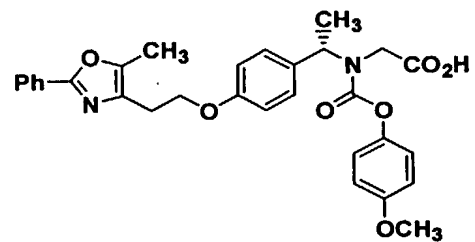
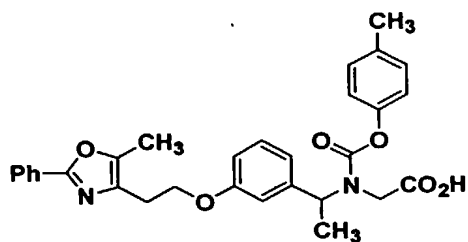
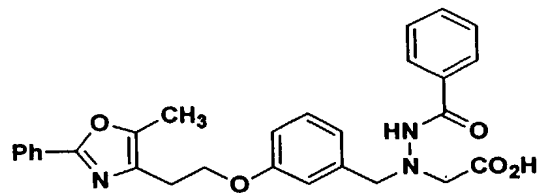
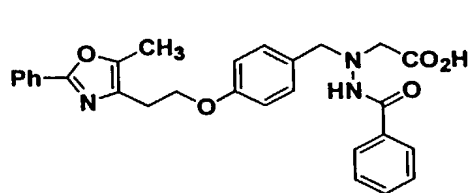


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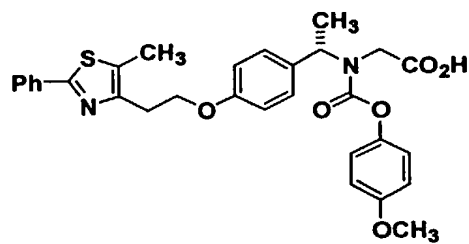
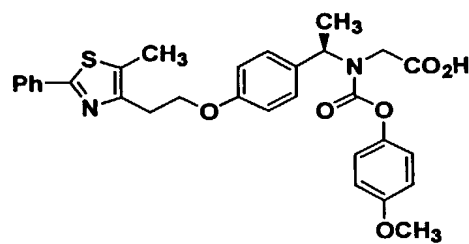
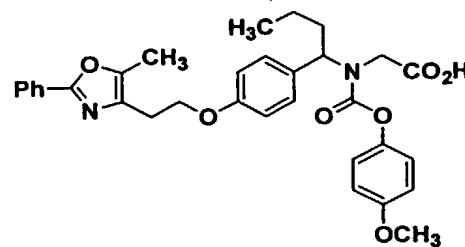
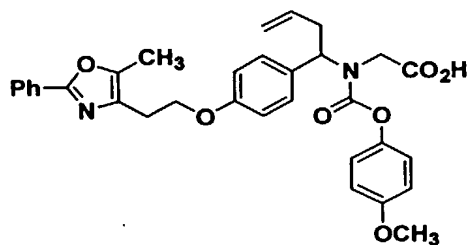


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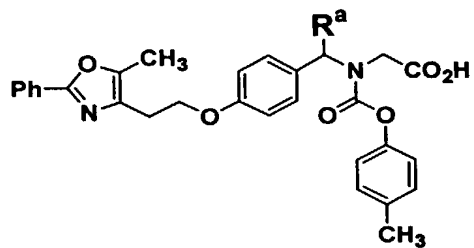
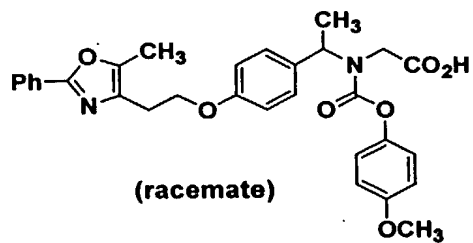




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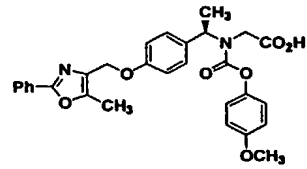
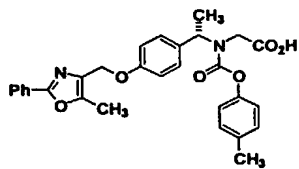
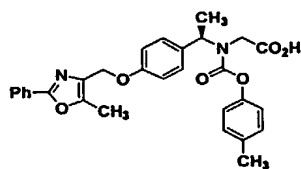
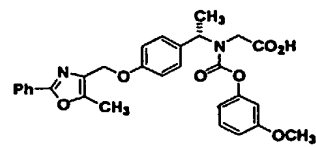
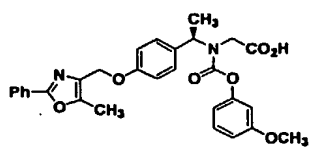
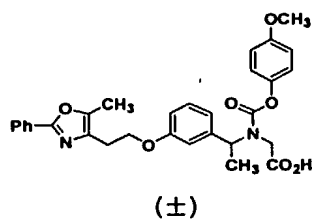
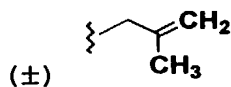
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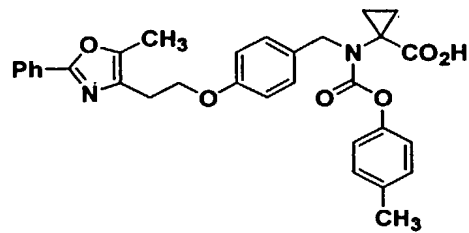
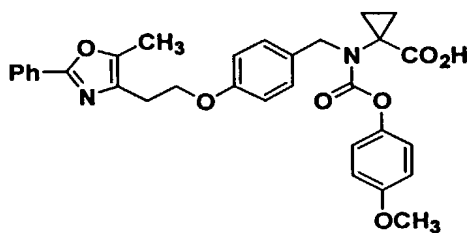
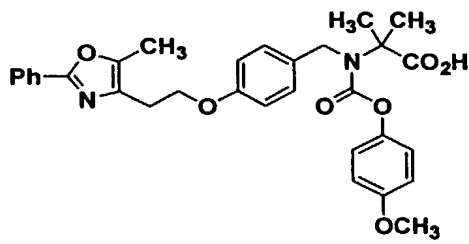
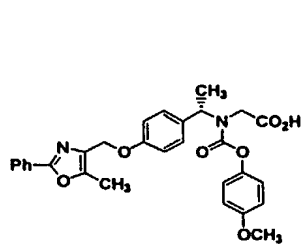


where $R^a = (\pm)\text{-Me}$, $(\pm)\text{ n-Bu}$,

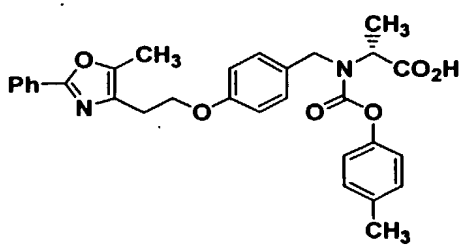
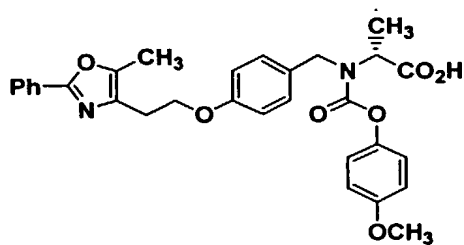
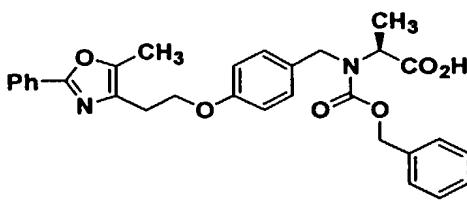
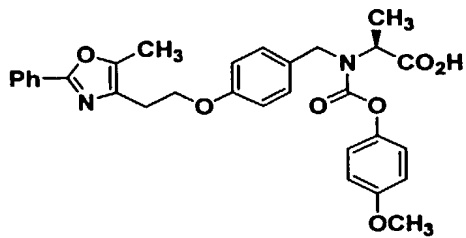
Cc1c(CCOc2ccc(cc2)C(C(=O)NCC(=O)O)R^a)on(c1)c3ccccc3C4=CC=C(C=C4)OC

where $R^a = (\pm) Et, (\pm) i-Bu,$

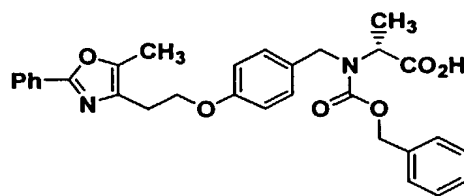


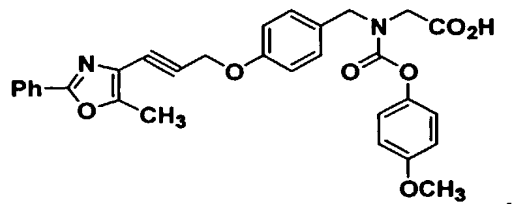
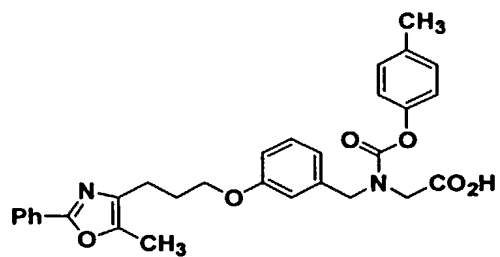
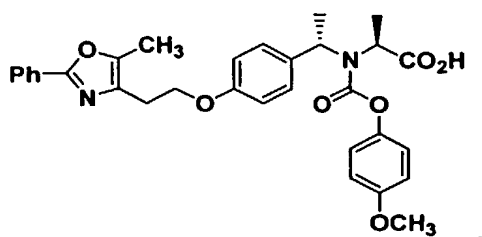
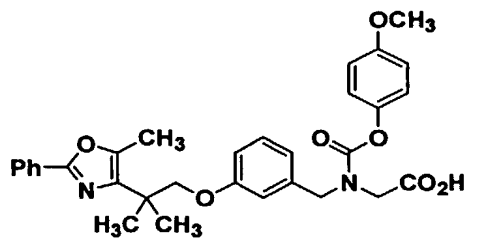


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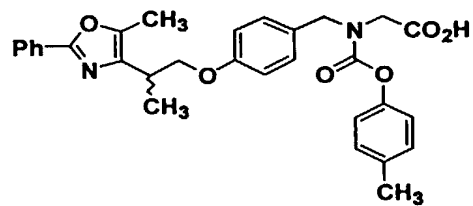
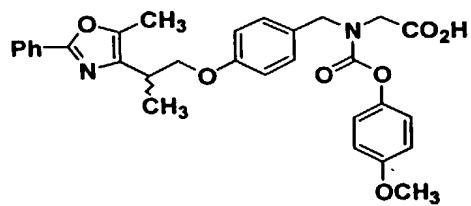
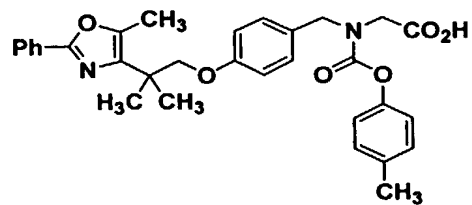
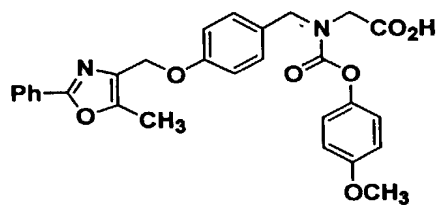
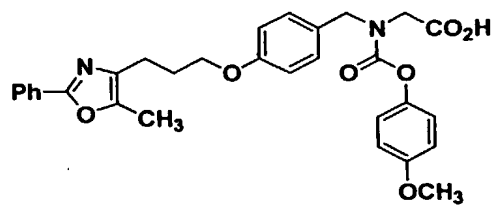
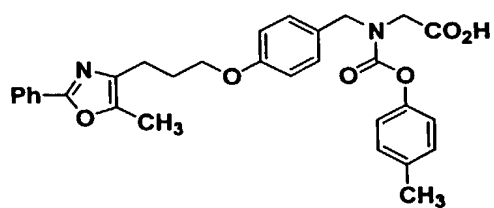


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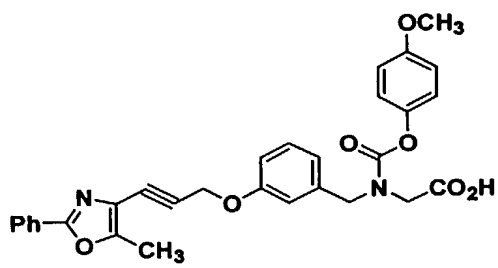
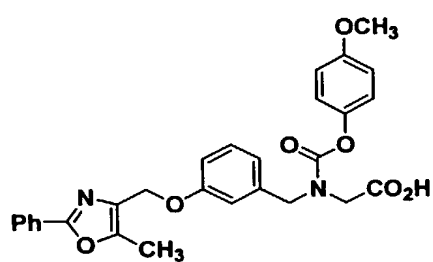
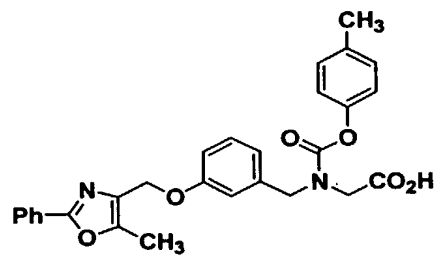
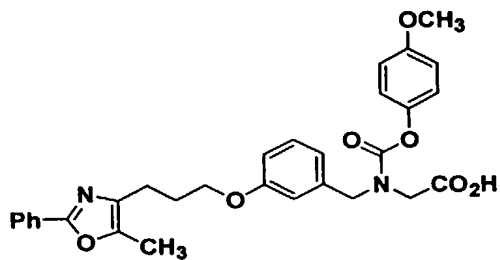


COc1ccc(OC(=O)NCCc2ccc(OCC3=CC=C(C=C3)c4nc(C5=CC=CC=C5)oc4C)cc2)cc1

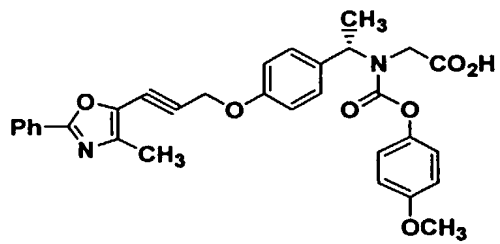
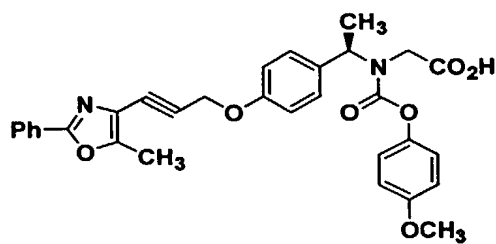
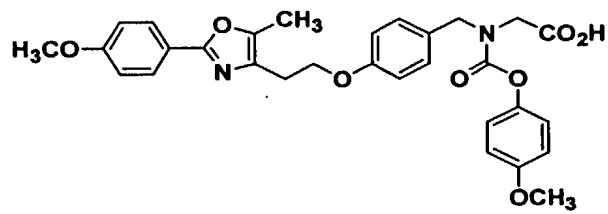
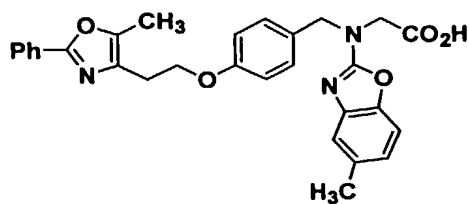
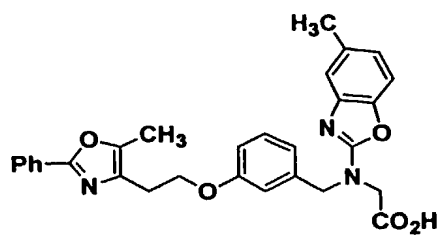
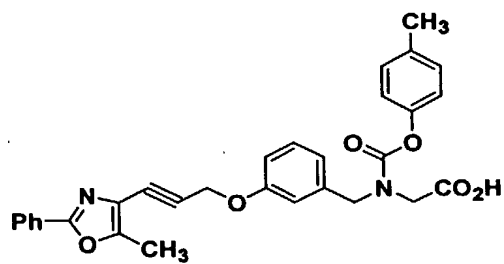
- 353 -



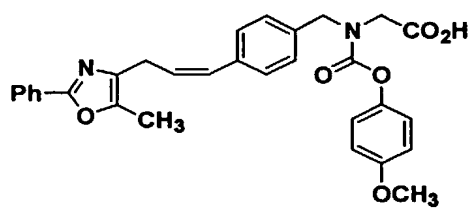
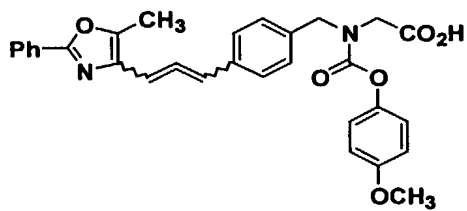
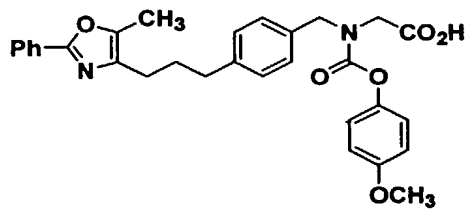
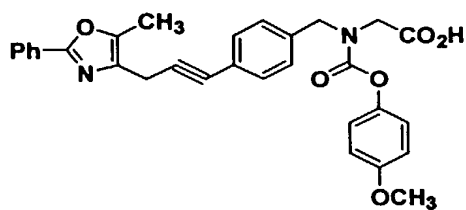
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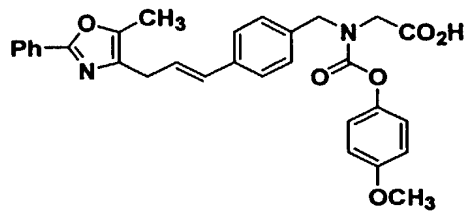
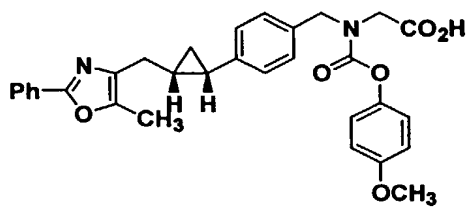
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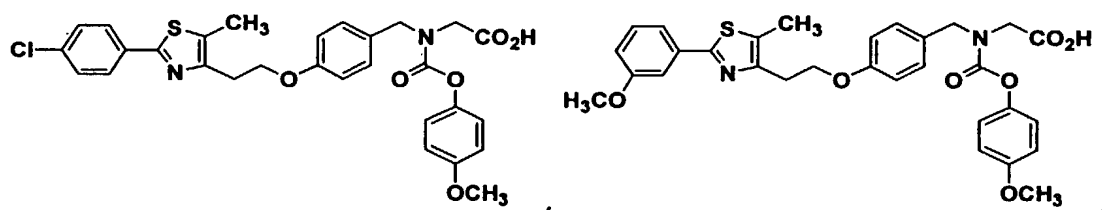
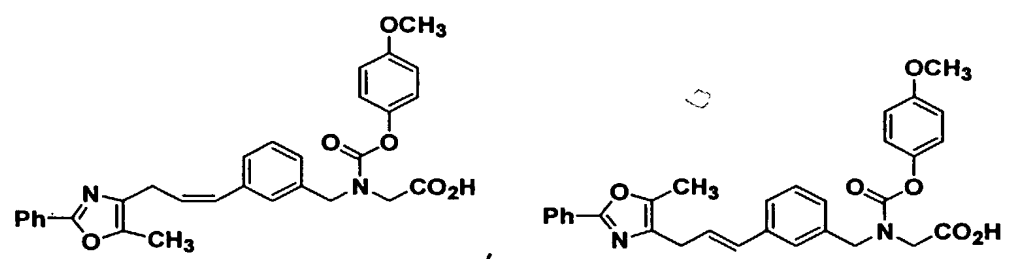
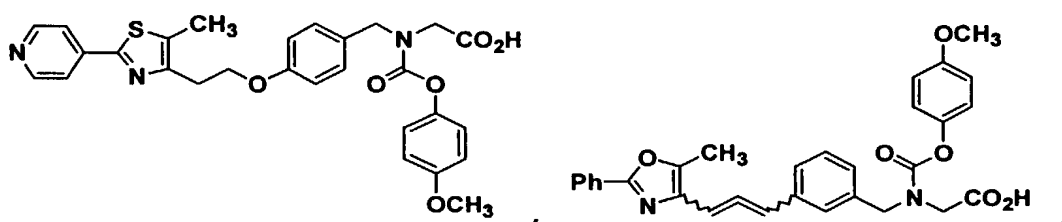


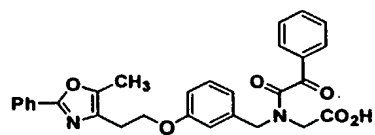
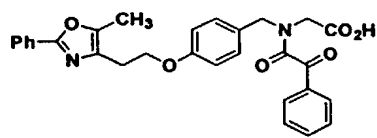
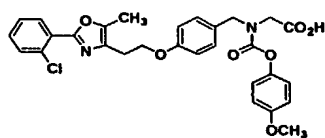
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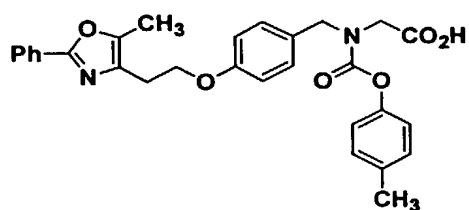
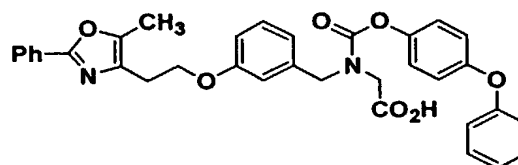
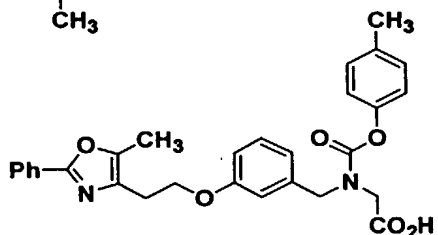
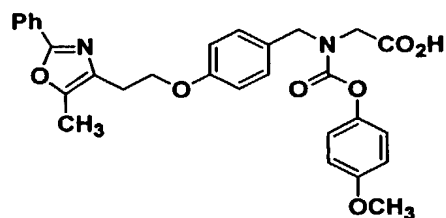
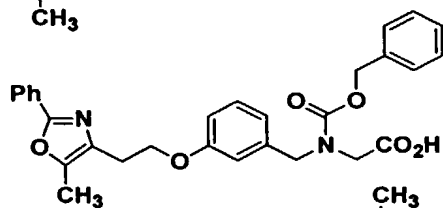
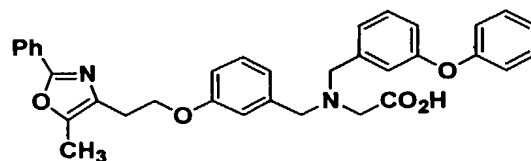
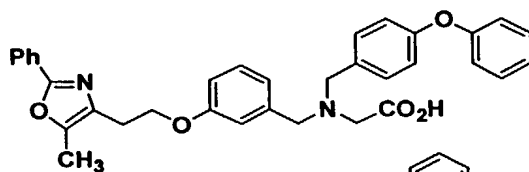
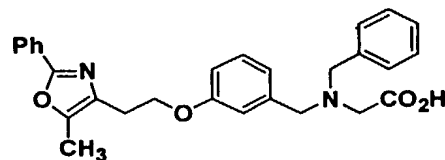
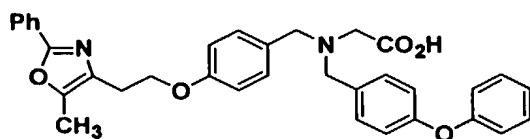
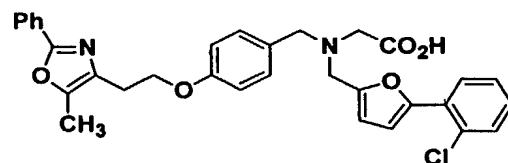
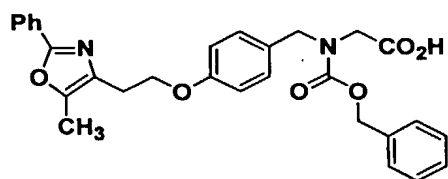


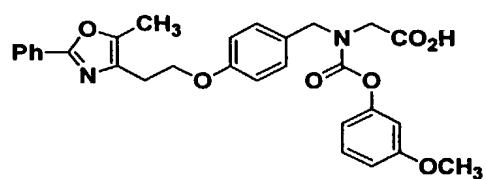
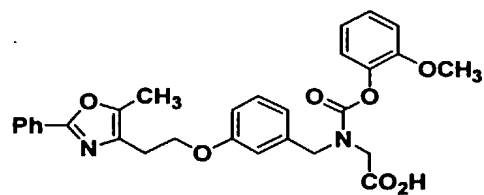
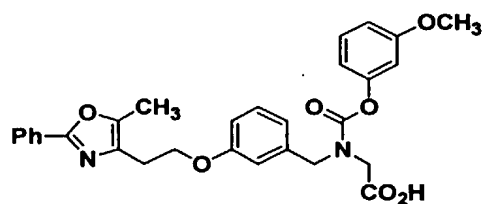
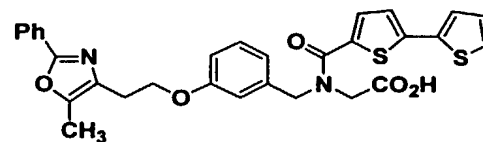
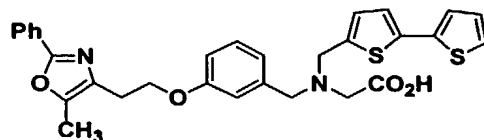
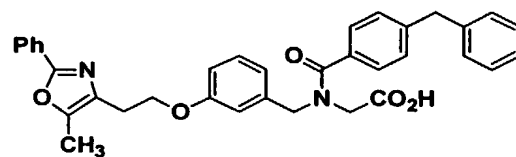
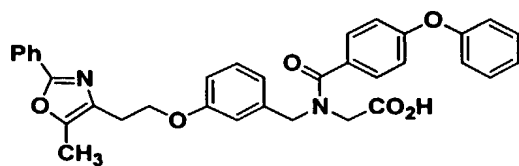
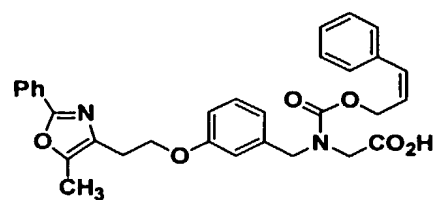
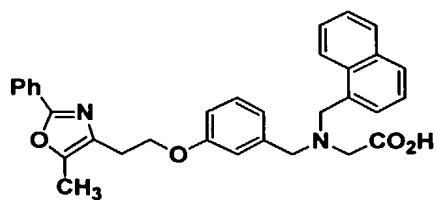
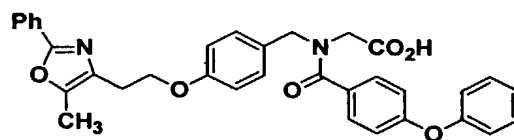
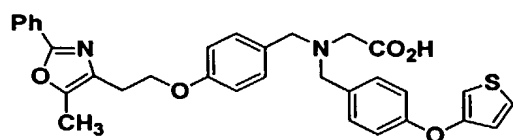


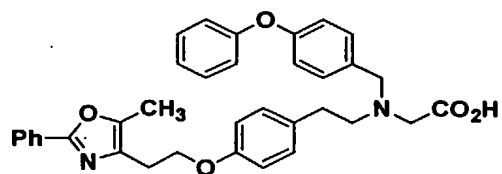
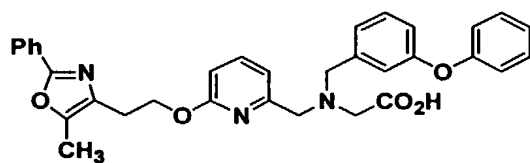
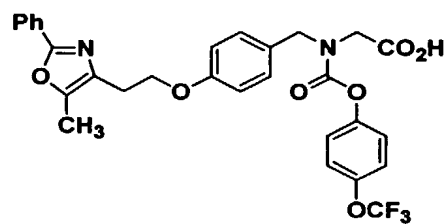
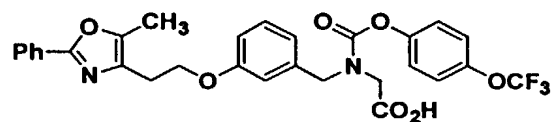
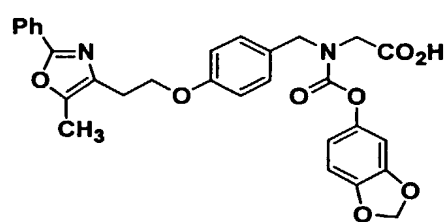
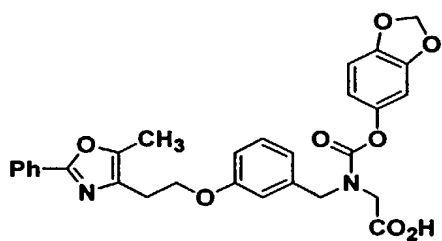
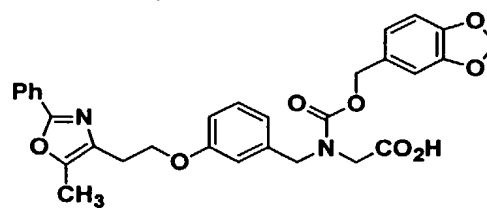
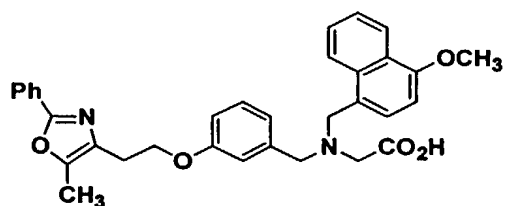
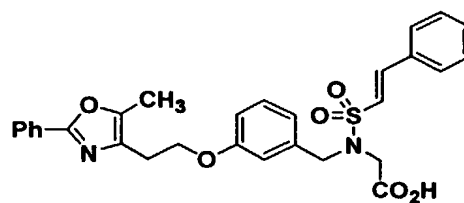
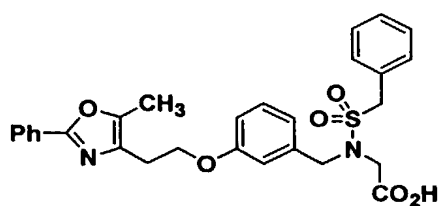


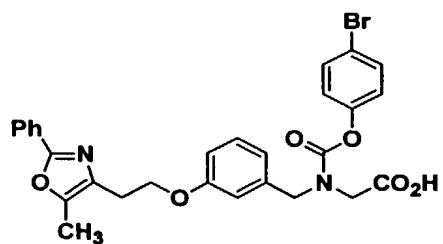
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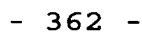
17. The compound as defined in Claim 1 having the structure

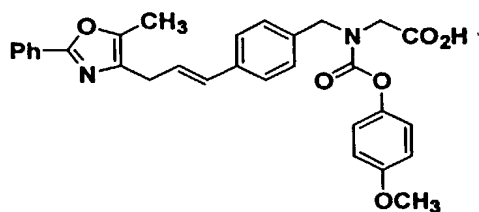




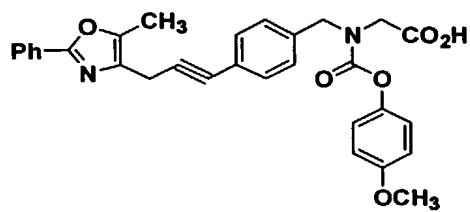
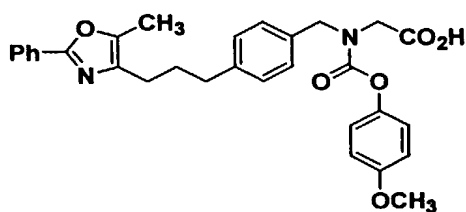




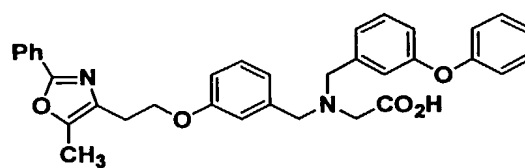
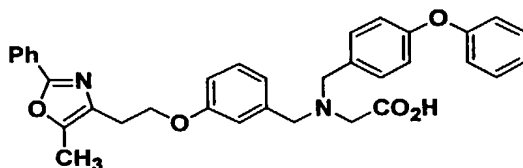
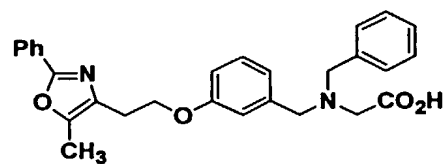
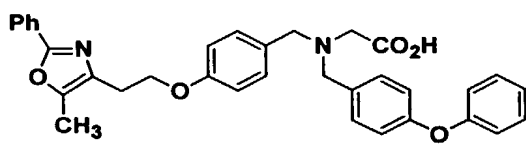
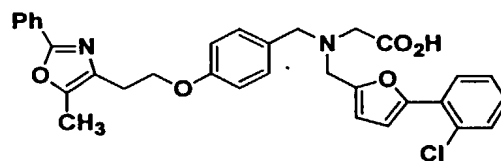
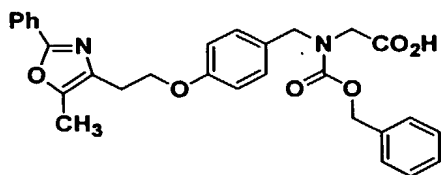


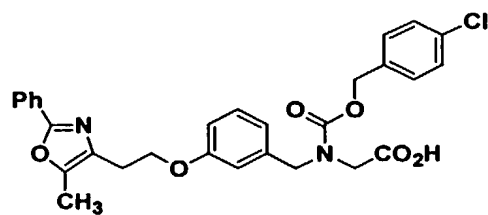
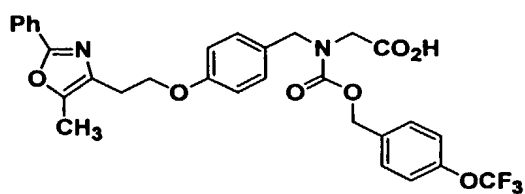
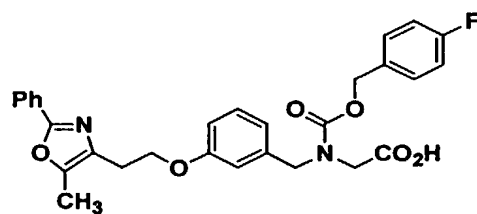
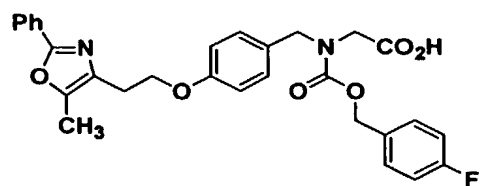
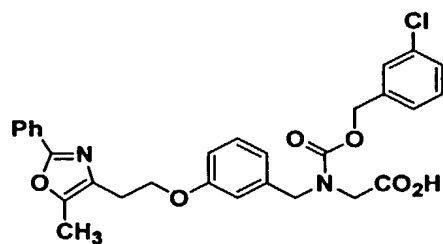
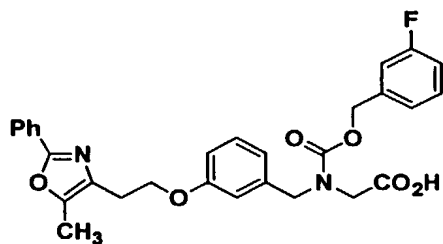
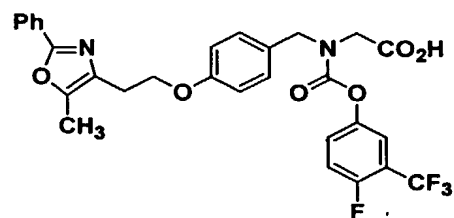
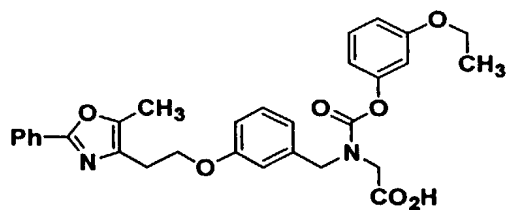


19. The compound as defined in Claim 1 having the
5 structure

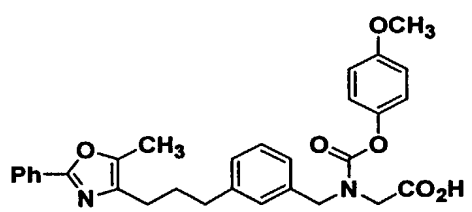
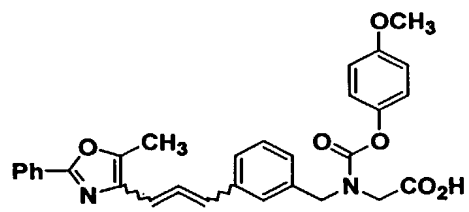
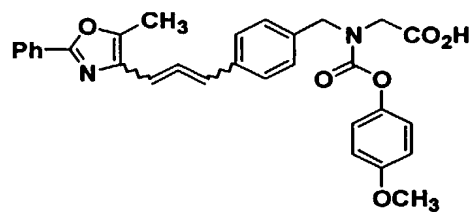
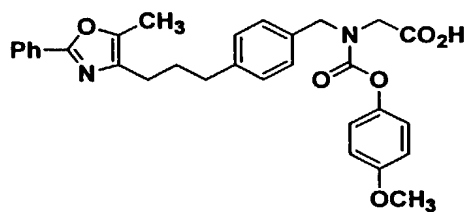


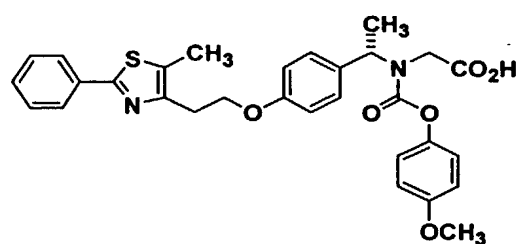
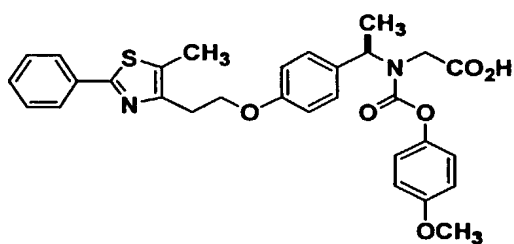
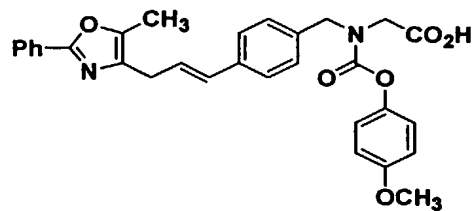
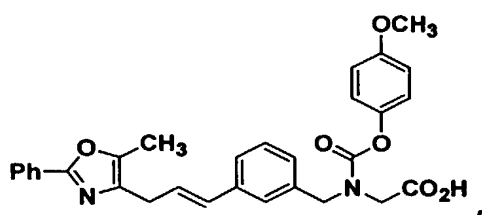
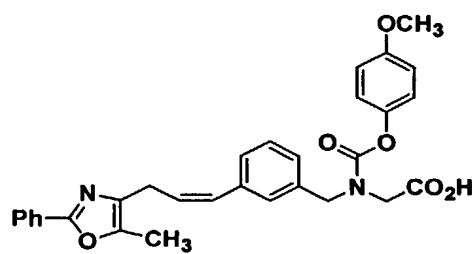
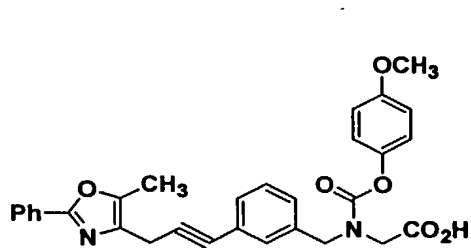
20. The compound as defined in Claim 1 having the
10 structure



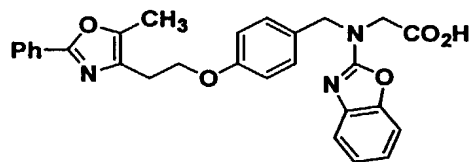
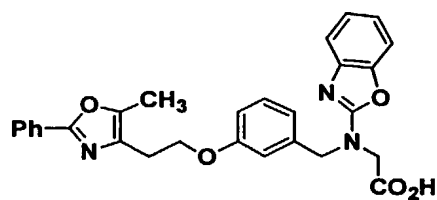
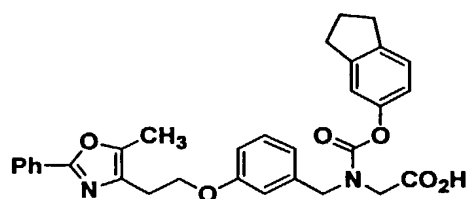
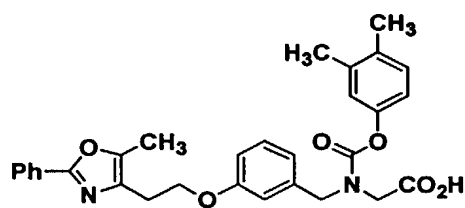
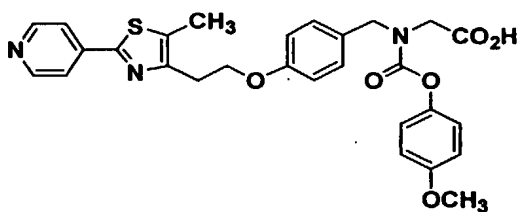


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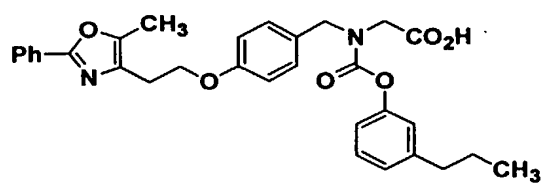
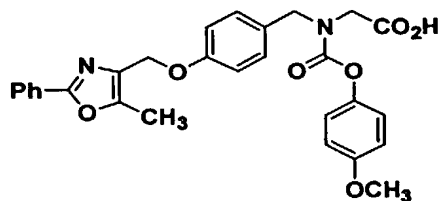
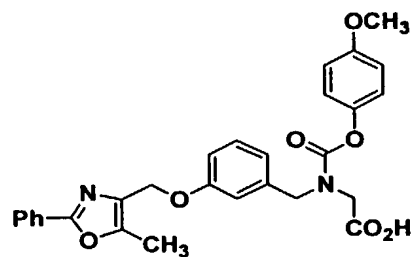
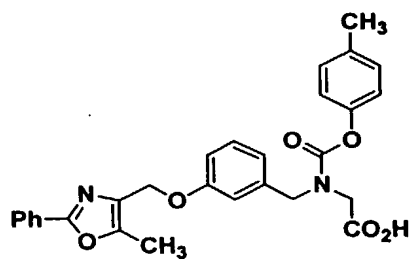
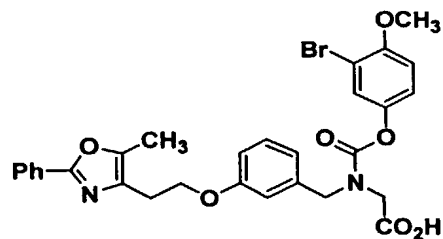
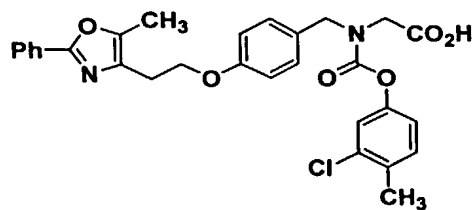




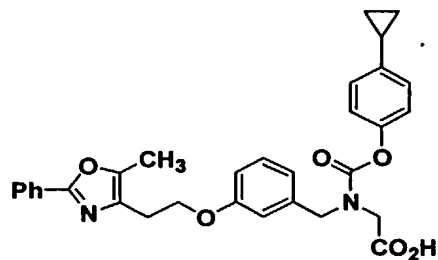
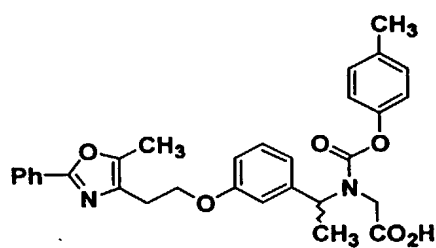
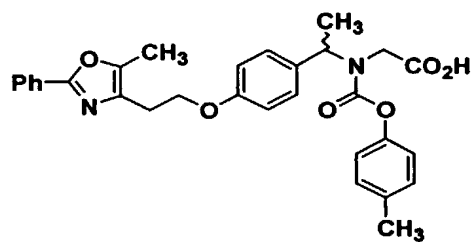
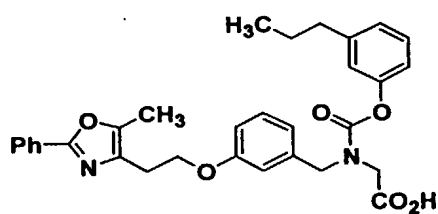
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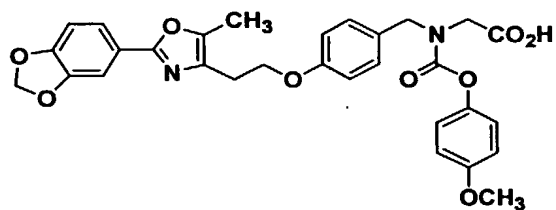
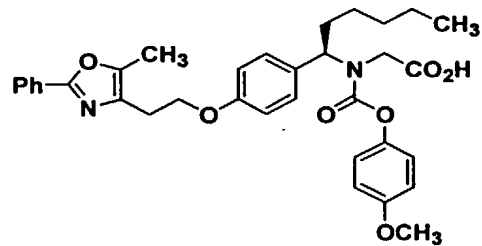
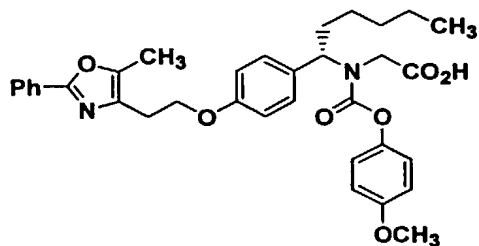
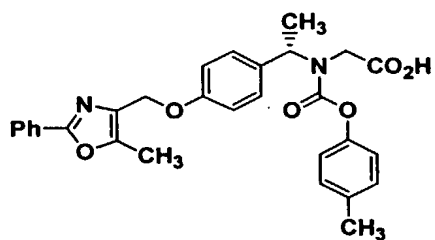
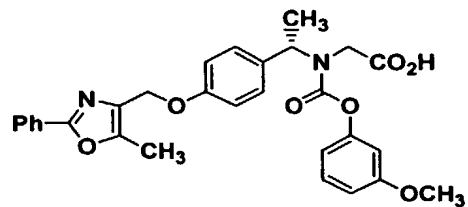
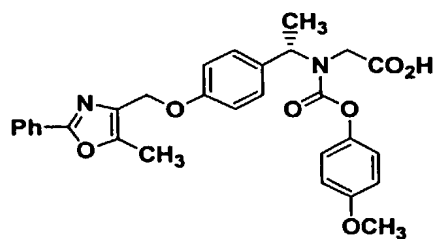


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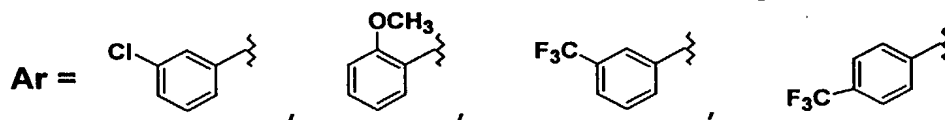
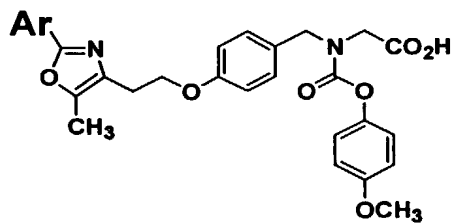


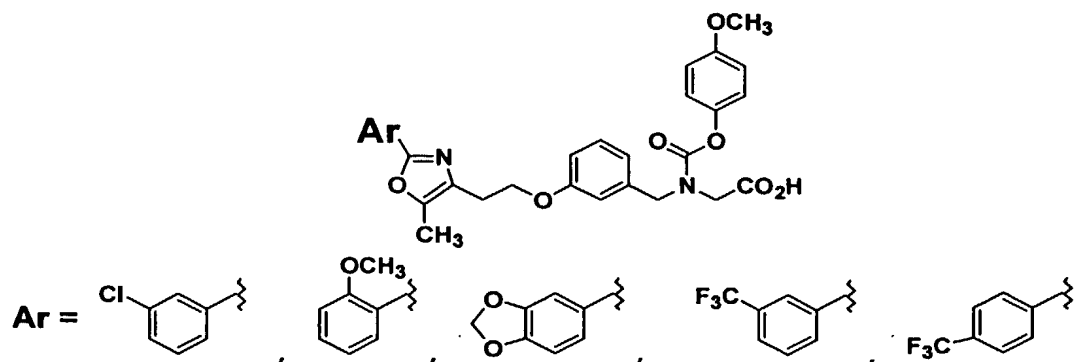
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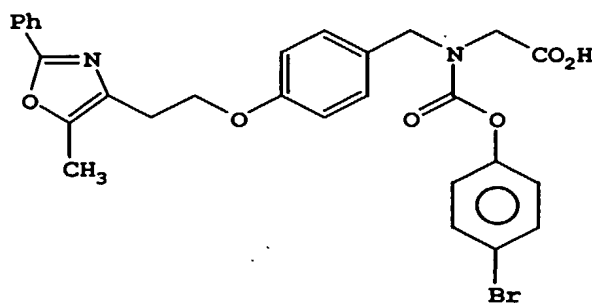


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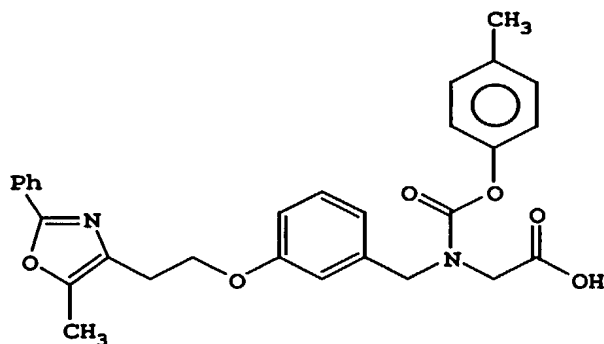




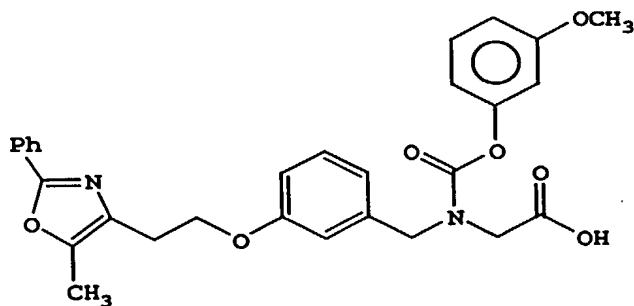
21. The compound as defined in Claim 1 having the
5 structure



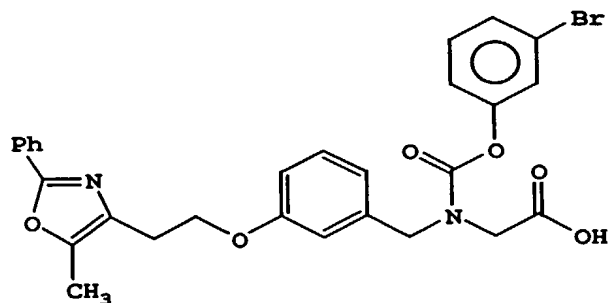
22. The compound as defined in Claim 1 having the structure



23. The compound as defined in Claim 1 having the structure

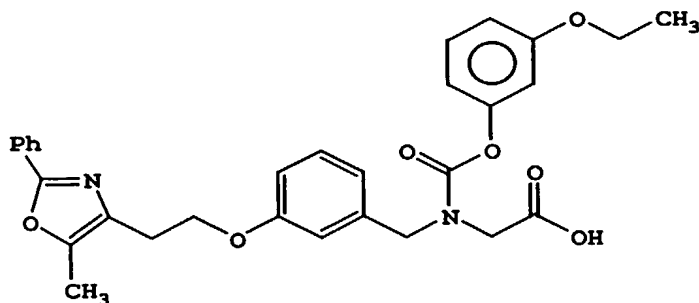


24. The compound as defined in Claim 1 having the structure



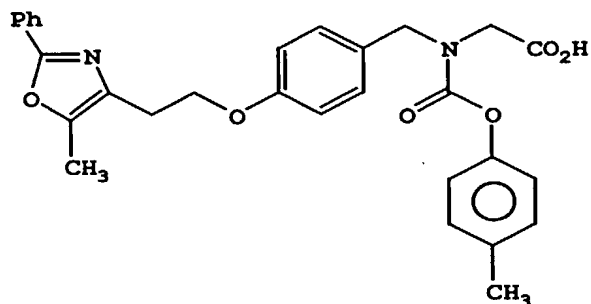
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25. The compound as defined in Claim 1 having the structure

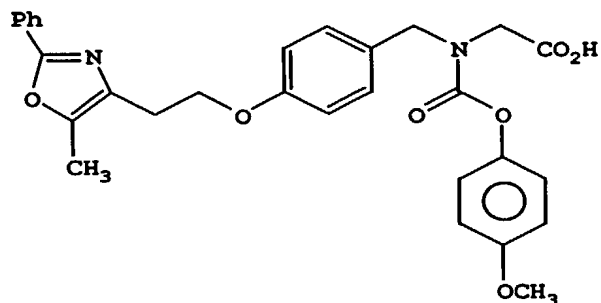


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26. The compound as defined in Claim 1 having the structure

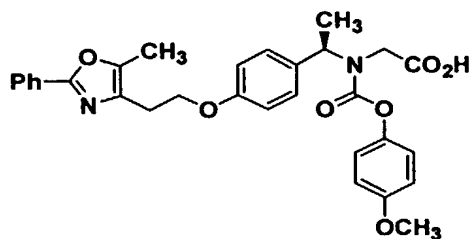


27. The compound as defined in Claim 1 having the structure



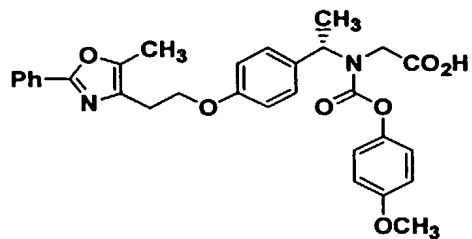
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28. The compound as defined in Claim 1 having the structure

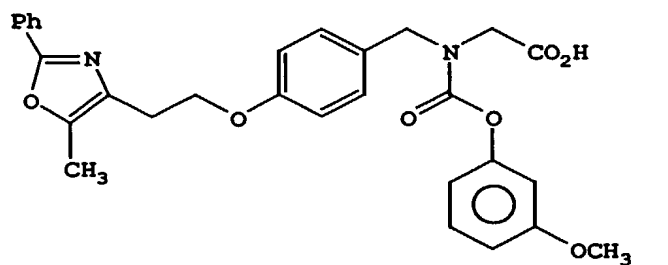


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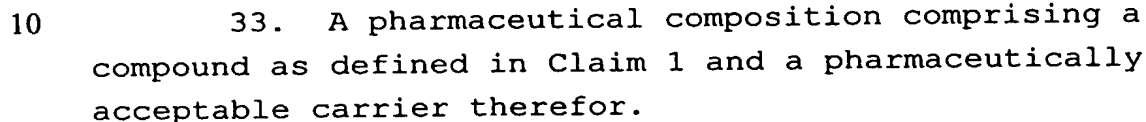
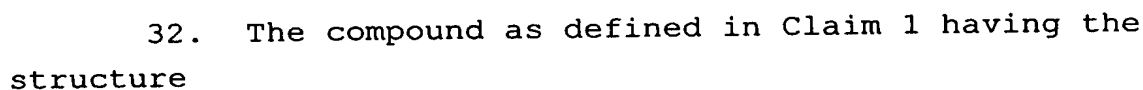
29. The compound as defined in Claim 1 having the structure



30. The compound as defined in Claim 1 having the
15 structure



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34. A method for lowering blood glucose levels
15 which comprises administering to a patient in need of
treatment a therapeutically effective amount of a
compound as defined in Claim 1.

35. A method for treating diabetes which
20 comprises administering to a patient in need of treatment
a therapeutically effective amount of a compound as
defined in Claim 1.

- 379 -

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inhibitor, a thyroid receptor agonist, an $\alpha 2$ inhibitor and/or an anorectic agent.

43. The combination as defined in Claim 42 wherein
5 the anti-obesity agent is orlistat, ATL-962, AJ9677,
L750355, CP331648, sibutramine, topiramate, axokine,
dexamphetamine, phentermine, phenylpropanolamine, and/or
mazindol.

10 44. The combination as defined in Claim 37 wherein the lipid lowering agent is an MTP inhibitor, an HMG CoA reductase inhibitor, a squalene synthetase inhibitor, a fibric acid derivative, an upregulator of LDL receptor activity, a lipoxygenase inhibitor, or an ACAT inhibitor.

45. The combination as defined in Claim 44 wherein the lipid lowering agent is pravastatin, lovastatin, simvastatin, atorvastatin, cerivastatin, fluvastatin, itavastatin, visastatin, fenofibrate, gemfibrozil, clofibrate, avasimibe, TS-962, MD-700, cholestagel, niacin and/or LY295427.

46. The combination as defined in Claim 44 wherein
the compound is present in a weight ratio to the lipid-
lowering agent within the range from about 0.001:1 to
25 about 100:1.

47. The combination as defined in Claim 37 wherein
the antihypertensive agent is an ACE inhibitor,
30 angiotensin II receptor antagonist, NEP/ACE inhibitor,
calcium channel blocker and/or β -adrenergic blocker.

48. The combination as defined in Claim 47 wherein the antihypertensive agent is an ACE inhibitor which is
35 captopril, fosinopril, enalapril, lisinopril, quinapril, benazepril, fentiapril, ramipril or moexipril; an NEP/ACE inhibitor which is omapatrilat, [S[(R*,R*)]-hexahydro-6-

an angiotensin II receptor antagonist which is
irbesartan, losartan or valsartan;

49. The combination as defined in Claim 37 wherein
10 the platelet aggregation inhibitor is aspirin,
clopidogrel, ticlopidine, dipyridamole or ifetroban.

51. A method for treating irritable bowel syndrome, Crohn's disease, gastric ulceritis or osteoporosis, or psoriasis, which comprises administering to a mammalian species in need of treatment a therapeutically effective amount of a compound as defined in Claim 1.

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52. The method as defined in Claim 36 wherein the disease is a liposarcoma or an epithelial tumor.

53. The method as defined in Claim 52 wherein the
35 epithelial tumor is a tumor of the breast, prostate,
colon, ovaries, stomach or lung.

54. The method as defined in Claim 36 wherein the disease is ductal carcinoma in situ of the breast, lobular carcinoma in situ of the breast, fibroadenoma of the breast, or prostatic intraepithelial neoplasia.

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